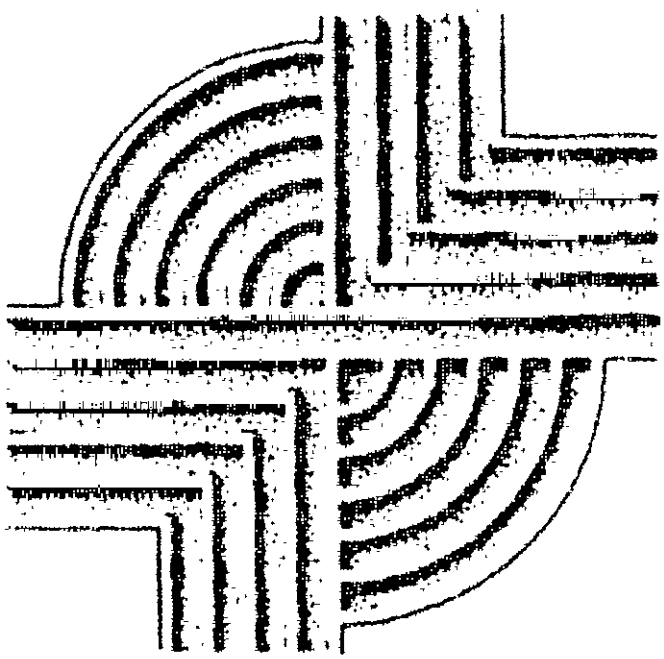
ARCHAEOLOGICAL SURVEY OF A PORTION OF THE PRUITT TRACT, SEASIDE PLANTATION, JAMES ISLAND, CHARLESTON COUNTY, SOUTH CAROLINA



CHICORA RESEARCH CONTRIBUTION 284

ARCHAEOLOGICAL SURVEY OF A PORTION OF THE PRUITT TRACT, SEASIDE PLANTATION, JAMES ISLAND, CHARLESTON COUNTY, SOUTH CAROLINA

Prepared By:
Michael Trinkley, Ph.D., RPA

Prepared For:
Mr. Herb Butler
Special Properties
216 Calhoun Street
Charleston, South Carolina 29401

CHICORA RESEARCH CONTRIBUTION 284

Chicora Foundation, Inc.
PO Box 8664
Columbia, SC 29202-8664
803/787-6910
Email: chicora@bellsouth.net
www.chicora.org

January 5, 2000

This report is printed on permanent paper ∞

ABSTRACT

This study reports on an intensive archaeological survey of a 13.9 acre tract of property in the southeastern corner of Seaside Plantation on James Island, Charleston County, South Carolina. The property, currently owned by Dr. Bert Pruitt, is being subdivided for development similar to the remainder of Seaside Plantation. In compliance with a conservation easement held by the Historic Charleston Foundation, an archaeological survey was requested by the real estate agent handling the transaction, Mr. Herb Butler of Special Properties. The property is intended to be divided into three lots, ranging in size from 3.13 to 6.61 acres.

The tract consists of generally level land bounded by a marsh inlet to the south, Seaside Plantation Blvd. to the west and northwest, existing development to the north and northeast, and the remainder of Dr. Bert Pruitt's property to the east. The current vegetation consists of a relatively second growth forest consisting of pine and a few hardwoods with a dense understory of herbaceous vegetation which had been bush hogged prior to this investigation. As a result access was generally easy throughout the tract, except for an area of freshwater wetlands on its western side.

Consultation with the S.C. Department of Archives and History revealed no National Register properties in the immediate area, although Dr. Pruitt's house, about 500 feet to the northeast, had been recorded by Historic Preservation Consultants as part of a county-wide architectural survey. The S.C. Institute of Archaeology and Anthropology reveals numerous archaeological sites in the general area of this tract, with the entire parcel falling within site 38CH507. Additional historic research was conducted by Chicora Foundation at the Charleston County Register of Mense Conveyances, which traced the property back to the first quarter of the nineteenth century when it was part of a 100 acre plantation held by S.H. Price.

Although much of the property is relatively low, exhibiting only moderately well drained soils, we chose to conduct shovel testing at 100-foot intervals since the tract was within a previously identified archaeological site and was in relatively close proximity to a known historic site. All fill was screened through ¼-inch mesh and the shovel tests were backfilled at the completion of the study.

With the exception of a single isolated find (producing a single sherd and flake in one shovel test), only modern (post-1970) refuse was identified. Our investigation did, however identify two ditch and dike systems which were subsequently confirmed to be old field lines. Also identified were the remains of the historic access road to the Pruitt residence which traversed the marsh.

Our study also revealed that collectors using metal detectors had visited the site, probably searching for materials associated with nearby Confederate earth works. As a result, we conducted a brief metal detector survey, focusing on three areas selected as having the easiest access for metal detector use. All three produced only modern (post-1970) materials. Additional comparison of the site area with available Civil War maps has failed to identify any known earthworks or other activity in this area.

Although this tract is situated within the boundaries of a previously recorded archaeological site, this site was very generally defined at a time when the entire area was under cultivation. We have found no evidence of significant archaeological or historical remains on the study tract. Consequently, we recommend no additional investigations or management activities.

It is possible that archaeological remains may be encountered in the corridor during construction. Construction crews should be advised to report any

discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the Charleston Historic Foundation or to Chicora Foundation. No construction should take place in the vicinity of these late discoveries until they have been examined by an archaeologist.

TABLE OF CONTENTS

LIST OF FIGURES

ACKNOWLEDGMENTS

I want to thank Mr. Tom Covington and Ms. Autumn Perkins of our staff who were responsible for assembling the background information for this project. Mr. Covington also assisted with the field investigations. I appreciate their dedication and thoroughness.

In addition, I appreciate the assistance and cooperation of the staff of the S. C. Institute of Archaeology and Anthropology, particularly Mr. Keith Derting and Ms. Sharon Pekrul. Both went out of their way to make our job easier and the final product more complete and useful.

I also want to thank Mr. Jonathan Poston with The Historic Charleston Foundation who shared information concerning the property with us and helped coordinate the survey. I also appreciate Ms. Sarah Fick providing information on the Pruitt house from her files.

Finally, I want to thank Special Properties for their concern regarding the cultural resources of South Carolina, as well as their continuing support of Chicora Foundation.

INTRODUCTION

Project Background

This work was conducted for Mr. Herb Butler, Special Properties, by Dr. Michael Trinkley, with assistance from Mr. Tom Covington, of Chicora Foundation. The project involves the historical and archaeological survey of a 13.9 acre tract of property owned by Dr. Bert Pruitt situated on the southeastern edge of the Seaside Plantation development on James Island in Charleston County, South Carolina (Figures 1 and 2).

The survey tract is bordered to the south by marshes of Seaside Creek, to the west by Seaside Plantation Boulevard, to the northwest by Eagle Watch Road, to the north by Seaside Plantation property, and to the east by the remainder of the tract owned by Dr. Pruitt. The tract is dominated by the development to the west and northwest, as well as the marshes and open water found to the east. This particular area of James Island has seen exceptional growth and development over the past 40 years, with what was originally almost entirely cultivated fields being transformed into a series of housing developments. What historically was known as Seaside or Stonefield Plantation is today known as the Seaside Plantation development.

The current tract is perhaps the last section of the original plantation undeveloped and a conservation easement is held on the property by the Historic Charleston Foundation. This easement specifies that an archaeological survey is required before any development of the property is possible. This study was conducted to assist the owner, and the real estate agent of record, undertake that development.

The investigation consists of an archaeological survey of the 13.9 acre tract; historic research including a title search focusing on additional information concerning the original plantation and on the nearby Civil War earthworks constructed as part of the defense of Charleston; and an architectural evaluation of the nearby Pruitt house. The only portion of the tract not investigated was a small (0.5 acre) island situated off the main parcel in marsh. This island was excluded since it is so small and low that it is unlikely any development could take place.

The field investigation was conducted by Dr. Michael Trinkley and Mr. Tom Covington on December 15, 1999. A total of 15 person hours were spent on-site conducting the survey. An additional 6-person hours were devoted to the examination of in-house resources dealing with the Civil War history of the property, coupled with a title search focusing on owners and plats for the tract at the Charleston County Register of Mesne Conveyances. A total of 4-person hours were devoted to research on the existing Pruitt house and completing a S.C. Department of Archives and History Statewide Survey Site Form. The laboratory analysis of the collections resulting from this investigation were conducted at Chicora's Columbia laboratories on December 22.

The resulting collections have been curated with the S.C. Institute of Archaeology and Anthropology as 38CH507, along with the field notes resulting from this study. The Statewide Site Survey Form for the Pruitt house has been filed with the S.C. Department of Archives and History as U/19/0678/2492049.

Natural Environment

The project area is situated in the south central portion of Charleston County. Charleston County is located in the lower Atlantic Coastal Plain of South Carolina and is bounded to the east by the Atlantic Ocean and a series of marsh, barrier, and sea islands (Mathews et al. 1980:133).

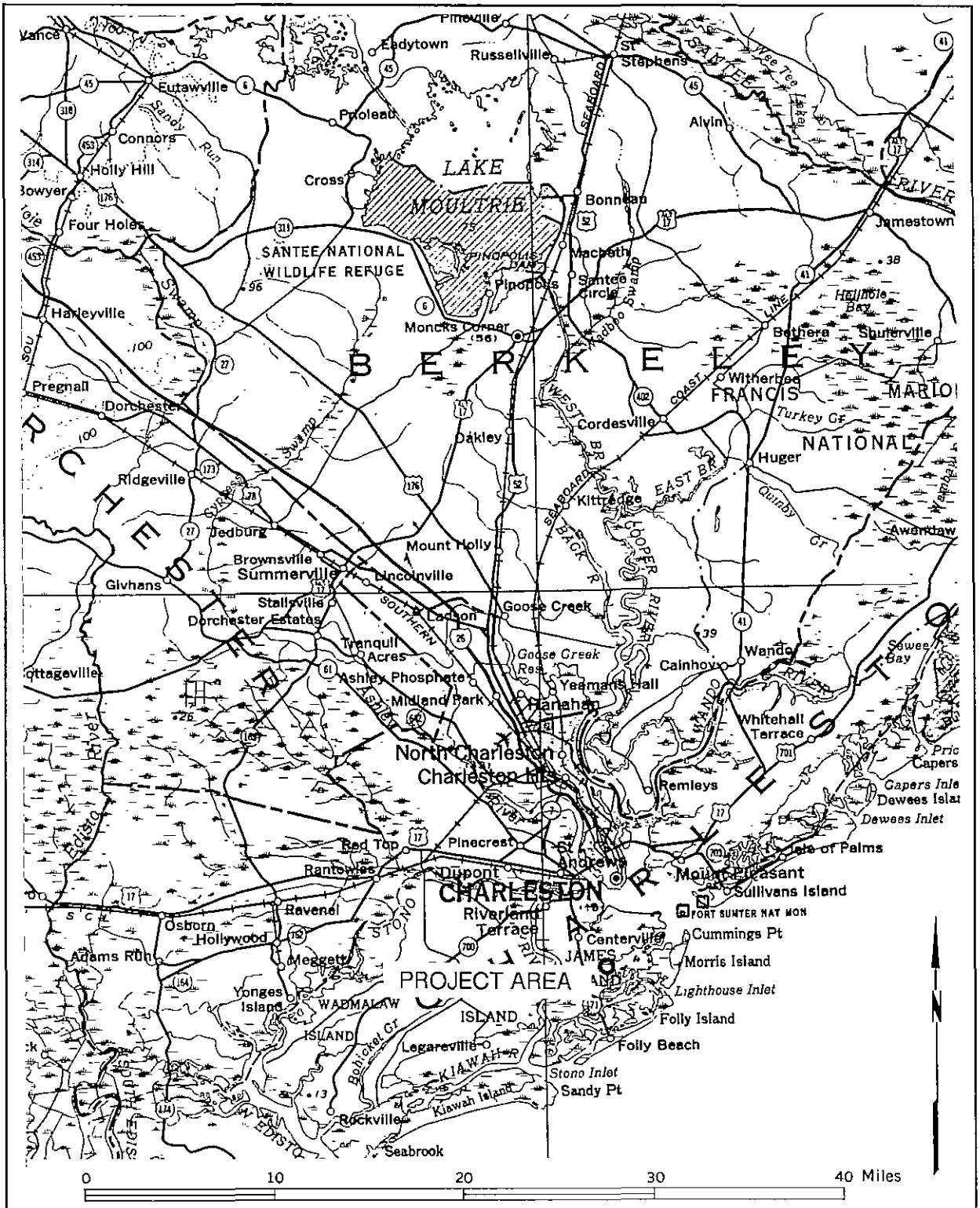


Figure 1. Project vicinity in Charleston County, South Carolina (basemap is USGS South Carolina 1:500,000).

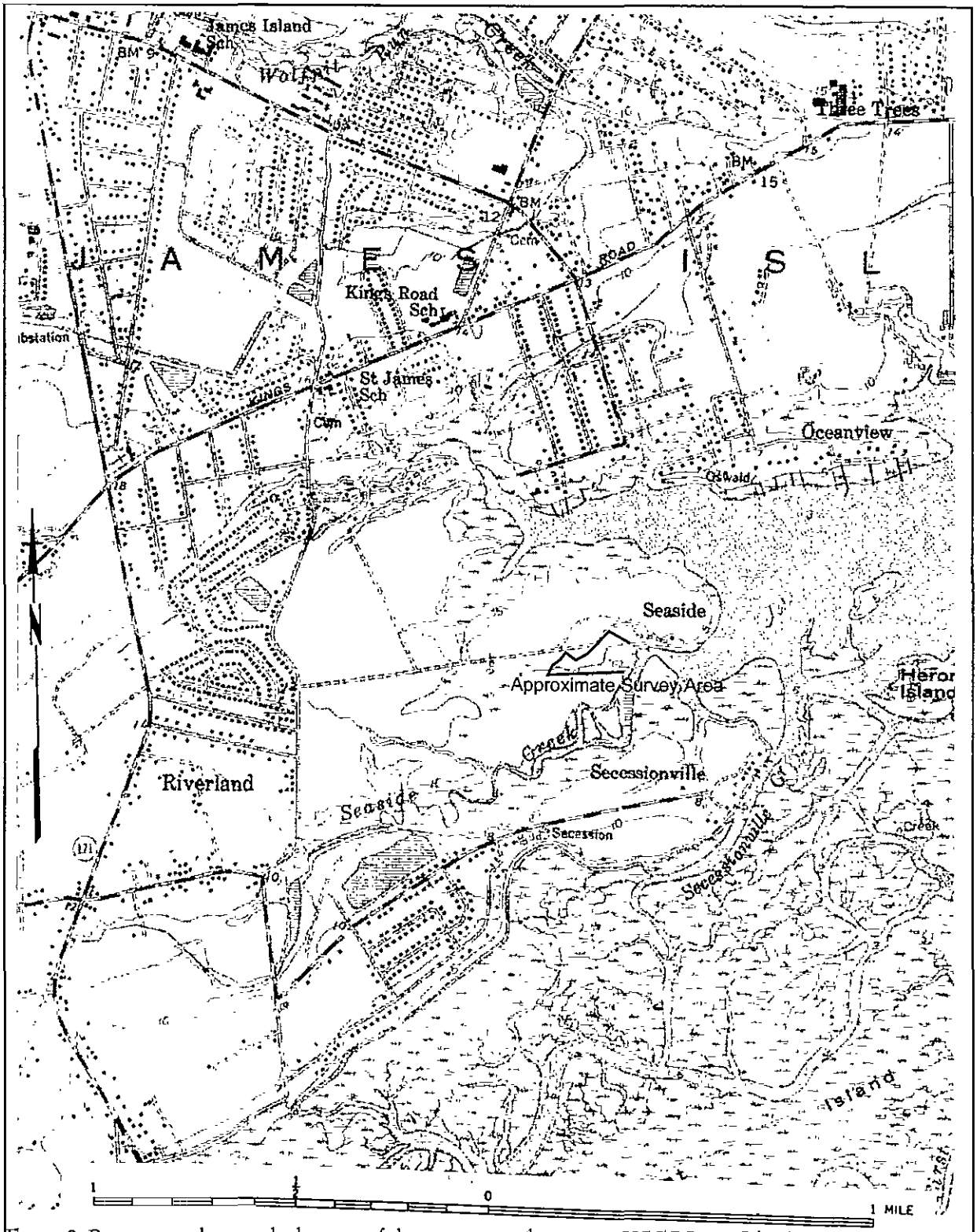


Figure 2. Project area showing the location of the survey tract (basemap is USGS James Island 7.5').

The mainland topography consists of subtle ridge and bay undulations, and is characteristic of beach ridge plains. Seven major drainages are found in Charleston County. Four of these, the Wando, Ashley, Stono, and North Edisto, are dominated by tidal flows and are saline. The three drainages with significant freshwater flow are the Santee, forming the northern boundary of the County, the South Edisto, forming the southern boundary, and the Cooper, which bisects the County. Because of the low topography, many broad, low-gradient interior drains are present as either extensions of the tidal rivers or as flooded bays and swales — similar to the freshwater lowlands found at the southwest edge of the survey tract. Just as common are the marshes, such as those associated with Seaside Creek on the southeastern boundary of the study tract.

Geology and Soils

Coastal Plain geological formations are unconsolidated sedimentary deposits of very recent age (Pleistocene and Holocene) lying unconformably on ancient crystalline rocks (Cooke 1936; Miller 1971:74). The Pleistocene sediments are organized into topographically distinct, but lithologically similar, geomorphic units, or terraces, parallel to the coast. The project area is identified by Cooke (1936) as part of the Pamlico terrace, which includes the land between the recent shore and an abandoned shore line about 25 feet AMSL. Cooke (1936:7) notes that evidence of ancient beaches and swales can still be seen in the Pamlico formation and this likely contributed to the ridge and trough topography present in some areas of James Island.

Within the coastal zone the soils are Holocene and Pleistocene in age and were formed from materials that were deposited during the various stages of coastal submergence. The formation of soils in the study area is affected by this parent material (primarily sands and clays), the temperate climate, the various soil organisms, topography, and time.

The mainland soils are Pleistocene in age and tend to have more distinct horizon development and diversity than the younger soils of the sea and barrier islands. Sandy to loamy soils predominate in the level to gently sloping mainland areas. The island soils are less diverse and less well developed, frequently lacking a well-defined B horizon. Organic matter is low and the soils tend to be acidic. The Holocene deposits typical of barrier islands and found as a fringe on some sea islands, consist almost entirely of quartz sand which exhibits little organic matter. Tidal marsh soils are Holocene in age and consist of fine sands, clay, and organic matter deposited over older Pleistocene sands. The soils are frequently covered by up to 2 feet of saltwater during high tides. Historically, marsh soils have been used as compost or fertilizer for a variety of crops, including cotton (Hammond 1884:510) and Allston mentions that the sandy soil of the coastal region, "bears well the admixture of salt and marsh mud with the compost" (Allston 1854:13).

Two soil series of loamy fine sands occur in the project area: Seabrook loamy fine sands and Kiawah loamy fine sands (Miller 1971:Map 69).

The Seabrook soils are moderately well drained and consist of an A or Ap horizon of very dark grayish-brown (10YR3/2) sand about 0.8 foot in depth. The underlying subsoil is a dark-brown to dark yellowish-brown (10YR4/3 to 10YR4/4) sand. These soils are found primarily on the northern portions of the survey tract, in areas that are slightly higher and better drained. Kiawah soils are a somewhat poorly drained soil with a high water table. The A horizon extends to 18 inches below the ground surface and consists of very dark grayish brown to grayish brown (10YR3/2 to 10YR4/2) loamy fine sand. The B horizon is also a grayish brown and dark grayish brown loamy fine sand (Miller 1971:26-27).

Climate

John Lawson described South Carolina in 1700 as having, "a sweet Air, moderate Climate, and fertile Soil" (Lefler 1967:86). Of course, Lawson tended to romanticize Carolina. In December 1740 Robert Pringle remarked that Charleston was having "hard frosts & Snow" characterized as "a great Detriment to the Negroes" (Edgar 1972:282), while in May 1744 Pringle states, "the weather having already Come in very hott" (Edgar 1972:685) — revealing the extraordinary shifts that often made Carolina far less of a paradise than implied by Lawson.

The major climatic controls of the area are latitude, elevation, distance from the ocean, and location with respect to the average tracks of migratory cyclones. Mount Pleasant's latitude of 32°37'N places it on the edge of the balmy subtropical climate typical of Florida, further south. As a result, there are relatively short, mild winters and long, warm, humid summers. The large amount of nearby warm ocean water surface produces a marine climate, which tends to moderate both the cold and hot weather. The Appalachian Mountains, about 220 miles to the northwest, block the shallow cold air masses from the northwest, moderating them before they reach the sea islands (Mathews et al. 1980:46).

The average high temperature in Charleston and Mount Pleasant in July is 81°F, although temperatures are frequently in the 90s during much of July (Kjerfve 1975:C-4). Mills noted:

> in the months of June, July, and August, 1752, the weather in Charleston was warmer than any of the inhabitants before had ever experienced. The mercury in the shade often rose above 90°, and for nearly twenty successive days varied between that an 101° (Mills 1972 [1826]:444).

The area normally experiences a high relative humidity, adding greatly to the discomfort. Kjerfve (1975:C-5) found an annual mean value of 73.5% RH, with the highest levels occurring during the summer. Pringle remarked in 1742 that guns "suffer'd with the Rust by Eying so Long here, & which affects any Kind of Iron Ware, much more in this Climate than in Europe" (Edgar 1972:465).

The annual rainfall in this portion of Charleston is about 49 inches, fairly evenly spaced over the year. While adequate for most crops, there may be periods of both excessive rain and drought. The Charleston area has recorded up to 20 inches of rain in a single month and the rainfall over a three month period has exceeded 30 inches no less than 9 times in the past 37 years. Likewise, periods of drought can occur and cause considerable damage to crops and livestock. Mills remarks that the "Summer of 1728 was uncommonly hot; the face of the earth was completely parched; the pools of standing water dried up, and the field reduced to the greatest distress" (Mills 1972 [1826]:447-448). Another significant drought occurred in 1845, affecting both the Low and Up Country.

The annual growing season is 295 days, one of the longest in South Carolina. This mild climate, adequate rainfall, and long growing season, as Hilliard (1984:13) notes, is largely responsible for the presence of many southern crops, such as cotton and sugar cane.

Floristics

The area of the study tract exhibits three major ecosystems: the maritime forest ecosystem which consists of the upland forest areas, the palustrine ecosystems which consist of essentially fresh water, non-tidal wetlands, and the salt-water dominated tidal marshes (Sandifer et al. 1980:7-9). All were important to the area's prehistoric and historic occupants.

The maritime forest ecosystem has been found to consist of five principal forest types, including the Oak-Pine forests, the Mixed Oak Hardwood forests, the Palmetto forests, the Oak thickets, and other miscellaneous wooded areas (such as salt marsh thickets and wax myrtle thickets).

Of these the Oak-Pine forests are most common, constituting large areas of Charleston's original forest community. In some areas palmetto becomes an important sub-dominant. Typically these forests are dominated by the laurel oak with pine (primarily loblolly with minor amounts of longleaf pine) as the major canopy co-dominant. Hickory is present, although uncommon. Other trees found are the sweet gum and magnolia, with sassafras, red bay, American holly, and wax myrtle and palmetto found in the understory.

Mills, in the early nineteenth century, remarked that:

> South Carolina is rich in native and exotic productions; the varieties of its soil, climate, and geological

> positions, afford plants of rare, valuable, and medicinal qualities; fruits of a luscious, refreshing, and nourishing nature; vines and shrubs of exquisite beauty, fragrance, and luxuriance, and forest trees of noble growth, in great variety (Mills 1972 [1826]:66).

The loblolly pine was called the "pitch or Frankincense Pine" and was used to produce tar and turpentine; the longleaf pine was "much used in building and for all other domestic purposes;" trees such as the red bay and red cedar were often used in furniture making and cedar was a favorite for posts; and live oaks were recognized as yielding "the best of timber for ship building;" (Mills 1972 [1826]:66-85). Mills also observed that:

> in former years cypress was much used in building, but the difficulty of obtaining it now, compared with the pine, occasions little of it to be cut for sale, except in the shape of shingles; the cypress is a most valuable wood for durability and lightness. Besides the two names we have cedar, poplar, beech, oak, and locust, which are or may be also used in building (Mills 1972 [1826]:460).

The "Oak and hickory high lands" according to Mills were, "well suited for corn and provisions, also for indigo and cotton" (Mills 1972 [1826]:443). The value of these lands in the mid-1820s was from $10 to $20 per acre, less expensive than the tidal swamp or inland swamp lands (where rice and, with drainage, cotton could be grown).

The freshwater palustrine ecosystem includes all wetland ecosystems, such as the swamps, bays, savannas, pocisins, and creeks where the salinities measure less than 0.5 ppt. These palustrine ecosystems tend to be diverse, although not well studied (Sandifer et al. 1980:295). Many of these freshwater areas are likely associated with the various troughs scattered across the area. A number of forest types may be found in the palustrine areas which would attract a variety of terrestrial mammals. The typical vegetation might consist of red maple, swamp tupelo, sweet gum, red bay, cypress, and various hollies. Also expected in these areas would be wading birds and reptiles. It seems likely that these freshwater environs were of particular importance to the prehistoric occupants, but posed only a passing hindrance to the historic plantation owners.

Along the southern edge of the property is situated the third environmental zone — the salt marsh and its border zonation. The upper marsh is dominated by marsh elder, sea myrtle or groundsel, and marshhay cordgrass. Slightly lower marsh areas are dominated by glasswort, smooth cordgrass, and sea oxeye. All of these communities are almost entirely dependent on the duration of flooding and the salinity of the water. While at first glance these marsh areas seem to offer little, they are actually full of biological diversity and provide a wealth of resources, including oysters and other shellfish, fish, wading and other marsh birds, as well as materials used for fertilizer.

The survey tract has experienced a very large degree of disturbance over its history. There is good evidence (based on cartographic sources) that the tract has been cultivated since at least the mid-eighteenth century. Of course, cultivation during the eighteenth and nineteenth centuries was likely to have been shallow, resulting in relatively little archaeological disturbance. By the twentieth century more mechanized farming was taking place and it is likely that subsoiling began to be used at least by 1950 or 1960. Although done only occasionally, this would have caused more dramatic damage to subsurface remains.

Aerial photographs (such as those in Miller 1971 or shown here as Figure 3) reveal that much of the project area was heavily cultivated as late as the end of the third quarter of the twentieth century. It has only been within the past 20 years that the survey tract has been taken out of cultivation and second growth pines, a few hardwoods, and dense brambles began to reclaim the once cultivated acreage (Figure 4).

Today even more extensive damage has been caused by development and the creation of a series of subdivisions. Adjacent Seaside Plantation development consists of man-made lakes, whose spoil has been used

Figure 3. Aerial photograph showing the study area in 1977 (GS-VEHU-1-23)

to enhance topography. In many areas virtually none of the original vegetation remains intact and the original topography and road system can only be guessed at.

Prehistoric and Historic Synthesis

The Prehistoric

The Paleo-Indian period, lasting from 12,000 to 8,000 B.C., is evidenced by basally thinned, side-notched projectile points; fluted, lanceolate projectile points, side scrapers, end scrapers; and drills (Coe 1964; Michie 1977; Williams 1968). The Paleo-Indian occupation, while widespread, does not appear to have been intensive. Artifacts are most frequently found along major river drainages, which Michie interprets to support the concept of an economy "oriented towards the exploitation of now extinct mega-fauna" (Michie 1977:124).

Unfortunately, little is known about Paleo-Indian subsistence strategies, settlement systems, or social organization. Generally, archaeologists agree that the Paleo-Indian groups were at a band level of society (see Service 1966), were nomadic, and were both hunters and foragers. While population density, based on the isolated finds, is thought to have been low, Walthall suggests that toward the end of the period, "there was an increase in population density and in territoriality and that a number of new resource areas were beginning to be exploited" (Walthall 1980:30).

The Archaic period, which dates from 8000 to

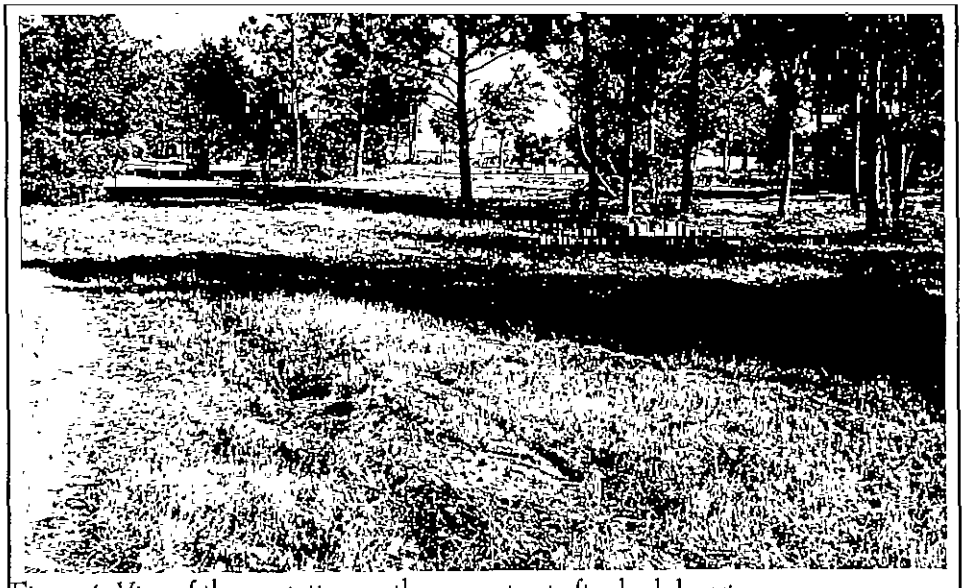


Figure 4. View of the vegetation on the survey tract after bush hogging.

2000 B.C., does not form a sharp break with the Paleo-Indian period, but is a slow transition characterized by a modern climate and an increase in the diversity of material culture. Associated with this is a reliance on a broad spectrum of small mammals, although the white tailed deer was likely the most commonly exploited mammal. The chronology established by Coe (1964) for the North Carolina Piedmont may be applied with little modification to the South Carolina coastal plain and piedmont. Archaic period assemblages, exemplified by corner-notched and broad-stem projectile points, are fairly common, perhaps because the swamps and drainages offered especially attractive ecotones.

In the Coastal Plain of the South Carolina there is an increase in the quantity of Early Archaic remains, probably associated with an increase in population and associated increase in the intensity of occupation. While Hardaway and Dalton points are typically found as isolated specimens along riverine environments, remains from the following Palmer phase are not only more common, but are also found in both riverine and interriverine settings. Kirks are likewise common in the coastal plain (Goodyear et al. 1979).

The two primary Middle Archaic phases found in the coastal plain are the Morrow Mountain and Guilford (the Stanly and Halifax complexes identified by Coe are rarely encountered). Our best information on the Middle Woodland comes from sites investigated west of the Appalachian Mountains, such as the work in the Little Tennessee River Valley. The work at Middle Archaic river valley sites, with their evidence of a diverse floral and faunal subsistence base, seems to stand in stark contrast to Caldwell's Middle Archaic "Old Quartz Industry" of Georgia and South Carolina, where axes, choppers, and ground and polished stone tools are very rare.

The Late Archaic is characterized by the appearance of large, square stemmed Savannah River projectile points (Coe 1964). These people continued the intensive exploitation of the uplands much like earlier Archaic groups. The bulk of our data for this period, however, comes from work in the Uwharrie region of North Carolina.

The Woodland period begins by definition with the introduction of fired clay pottery about 2000 B.C. along the South Carolina coast (the introduction of pottery, and hence the beginning of the Woodland period, occurs much later in the Piedmont of South Carolina). It should be noted that many researchers call the period from about 2500 to 1000 B.C. the Late Archaic because of a perceived continuation of the Archaic lifestyle in spite of the manufacture of pottery. Regardless of terminology, the period from 2500 to 1000 B.C. is well documented on the South Carolina coast and is characterized by Stallings (fiber-tempered) pottery (see Figure 5 for a synopsis of Woodland phases and pottery designations). The subsistence economy during this early period was based primarily on deer hunting and fishing, with supplemental inclusions of small mammals, birds, reptiles, and shellfish.

Like the Stallings settlement pattern, Thom's Creek sites are found in a variety of environmental zones and take on several forms. Thom's Creek sites are found throughout the South Carolina Coastal Zone, Coastal Plain, and up to the Fall Line. The sites are found into the North Carolina Coastal Plain, but do not appear to extend southward into Georgia.

In the Coastal Plain drainage of the Savannah River there is a change of settlement, and probably subsistence, away from the riverine focus found in the Stallings Phase (Hanson 1982:13; Stoltman 1974:235-236). Thom's Creek sites are more commonly found in the upland areas and lack evidence of intensive shellfish collection. In the Coastal Zone large, irregular shell middens, small, sparse shell middens; and large "shell rings" are found in the Thom's Creek settlement system.

The Deptford phase, which dates from 1100 B.C. to A.D. 600, is best characterized by fine to coarse sandy paste pottery with a check stamped surface treatment. The Deptford settlement pattern involves both coastal and inland sites.

Inland, sites such as 38AK228-W, 38LX5, 38RD60, and 38BM40 indicate the presence of an extensive Deptford occupation on the Fall Line and the Coastal Plain, although sandy, acidic soils preclude statements on the subsistence base (Anderson 1979;

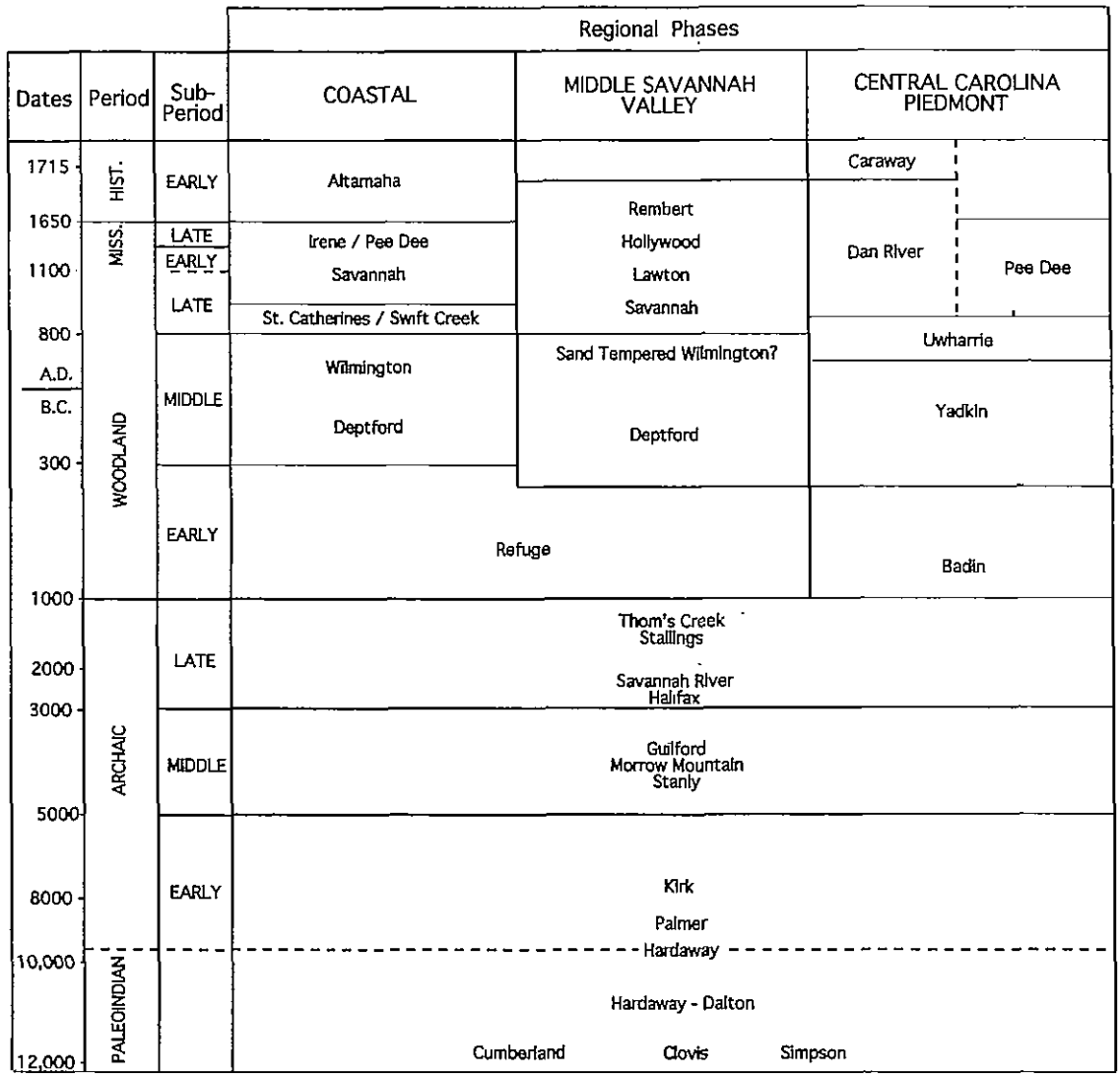


Figure 5. Cultural periods along the coast of South Carolina.

Ryan 1972; Trinkley 1980b). These interior or upland Deptford sites, however, are strongly associated with the swamp terrace edge, and this environment is productive not only in nut masts, but also in large mammals such as deer. Perhaps the best data concerning Deptford "base camps" comes from the Lewis-West site (38AK228-W), where evidence of abundant food remains, storage pit features, elaborate material culture, mortuary behavior, and craft specialization has been reported (Sassaman et al. 1990:96-98).

Throughout much of the Coastal Zone and Coastal Plain north of Charleston, a somewhat different cultural manifestation is observed, related to the "Northern Tradition" (e.g., Caldwell 1958). This recently identified assemblage has been termed Deep Creek and was first identified from northern North Carolina sites (Phelps 1983). The Deep Creek assemblage is characterized by pottery with medium to coarse sand inclusions and surface treatments of cord marking, fabric impressing, simple stamping, and net impressing. Much of this material has been previously designated as the Middle Woodland "Cape Fear" pottery originally typed by South (1976). The Deep Creek wares date from about 1000 B.C. to A.D. 1 in North Carolina, but may date later in South Carolina. The Deep Creek settlement and subsistence systems are poorly known, but appear to be very similar to those identified with the Deptford phase.

The Deep Creek assemblage strongly resembles Deptford both typologically and temporally. It appears this northern tradition of cord and fabric impressions was introduced and gradually accepted by indigenous South Carolina populations. During this time some groups continued making only the older carved paddle-stamped pottery, while others mixed the two styles, and still others (and later all) made exclusively cord and fabric stamped wares.

The Middle Woodland in South Carolina is characterized by a pattern of settlement mobility and short-term occupation. On the southern coast it is associated with the Wilmington phase, while on the northern coast it is recognized by the presence of Hanover, McClellanville or Santee, and Mount Pleasant assemblages. The best data concerning Middle Woodland Coastal Zone assemblages comes from Phelps' (1983:32-33) work in North Carolina. Associated items include a small variety of the Roanoke Large Triangular points (Coe 1964:110-111), sandstone abraders, shell pendants, polished stone gorgets, celts, and woven marsh mats. Significantly, both primary inhumations and cremations are found.

On the Coastal Plain of South Carolina, researchers are finding evidence of a Middle Woodland Yadkin assemblage, best known from Coe's work at the Doerschuk site in North Carolina (Coe 1964:25-26). Yadkin pottery is characterized by a crushed quartz temper and cord marked, fabric impressed, and linear check stamped surface treatments. The Yadkin ceramics are associated with medium-sized triangular points, although Oliver (1981) suggests that a continuation of the Piedmont Stemmed Tradition to at least A.D. 300 coexisted with this Triangular Tradition. The Yadkin series in South Carolina was first observed by Ward (1978, 1983) from the White's Creek drainage in Marlboro County, South Carolina. Since then, a large Yadkin village has been identified by DePratter at the Dunlap site (38DA66) in Darlington County, South Carolina (Chester DePratter, personal communication 1985) and Blanton et al. (1986) have excavated a small Yadkin site (38SU83) in Sumter County, South Carolina. Research at 38FL249 on the Roche Carolina tract in northern Florence County revealed an assemblage including Badin, Yadkin, and Wilmington wares (Trinkley et al. 1993:85-102). Anderson et al. (1982:299-302) offer additional typological assessments of the Yadkin wares in South Carolina.

Over the years the suggestion that Cape Fear might be replaced by such types as Deep Creek and Mount Pleasant has raised considerable controversy. Taylor, for example, rejects the use of the North Carolina types in favor of those developed by Anderson et al. (1982) from their work at Mattassee Lake in Berkeley County (Taylor 1984:80). Cable (1991) is even less generous in his denouncement of ceramic constructs developed nearly a decade ago, also favoring adoption of the Mattassee Lake typology and chronology. This construct, recognizing five phases (Deptford I - III, McClellanville, and Santee I), uses a type variety system.

Regardless of terminology, these Middle

Woodland Coastal Plain and Coastal Zone phases continue the Early Woodland Deptford pattern of mobility. While sites are found all along the coast and inland to the Fall Line, shell midden sites evidence sparse shell and artifacts. Gone are the abundant shell tools, worked bone items, and clay balls. Recent investigations at Coastal Zone sites such as 38BU747 and 38BU1214, however, have provided some evidence of worked bone and shell items at Deptford phase middens (see Trinkley 1990).

In many respects the South Carolina Late Woodland may be characterized as a continuation of previous Middle Woodland cultural assemblages. While outside the Carolinas there were major cultural changes, such as the continued development and elaboration of agriculture, the Carolina groups settled into a lifeway not appreciably different from that observed for the previous 500 to 700 years (cf. Sassaman et al. 1990:14-15). This situation would remain unchanged until the development of the South Appalachian Mississippian complex (see Ferguson 1971).

The South Appalachian Mississippian Period (ca. A.D. 1100 to 1640) is the most elaborate level of culture attained by the native inhabitants and is followed by cultural disintegration brought about largely by European disease. The period is characterized by complicated stamped pottery, complex social organization, agriculture, and the construction of temple mounds and ceremonial centers. The earliest phases include the Savannah and Pee Dee (A.D. 1200 to 1550).

Historic Overview

Just as there are a large number of sources recounting the prehistory of the project area, the history of Charleston County has been extensively reviewed, summarized, and critiqued. There should hardly be any need to do more than point the interested reader in one or two directions for additional information and details. Simple, and readily available, summaries include *A Short History of Charleston* (Rosen 1982) and *Charleston! Charleston!* (Fraser 1989). More specific to James Island is the previous architectural survey (Schneider and Stockton 1989) and a popular local history book (Hayes 1978).

Although some aspects of the area's history (such as the activities surrounding the Civil War, the defense of Charleston, and the Battle of Secessionville) are well researched, others (such as the postbellum agricultural history of the island) are not nearly as well understood. Nevertheless, we have at least a general idea of the activities surrounding this particular tract.

Colonial and Antebellum Settlement

The English established the first permanent settlement in what is today South Carolina in 1670 on the west bank of the Ashley River. Like other European powers, the English were lured to "New World" for reasons other than the acquisitions of land and promotion of agriculture. The Lords Proprietors, who owned the colony until 1719-1720, intended to discover a staple crop whose marketing would provide great wealth through the mercantile system.

By 1680 the settlers of Albermarle Point had moved their village across the bay to the tip of the peninsula formed by the Ashley and Cooper rivers. This new settlement at Oyster Point would become modern-day Charleston. The move provided not only a more healthful climate and an area of better defense, but:

> the situation of this Town is so convenient for public Commerce that it rather seems to be the design of some skillful Artist than the accidental position of nature (Mathews 1954:153).

The early settlers of the Carolina colony came from other mainland colonies, England, and the European continent. But the future of Carolina was largely directed by the large number of colonists from the English West Indies. This Caribbean connection has been discussed by Waterhouse (1975), who argues that the Caribbean immigrants were largely from old families of economic and political prominence which formed the Barbados élite. Waterhouse observes that while elsewhere in the American colonies the early settled families were displaced from their established positions of power and economic superiority by newcomers, this did not occur in South Carolina. In Carolina:

> a relatively large proportion of those who, in the middle of the eighteenth century, were among the wealthier inhabitants, were descended from those families who had arrived in the colony during the first twenty years of its settlement (Waterhouse 1975:280).

This immigration turned out to be a significant factor in the stability and longevity of South Carolina's colonial élite. It also firmly established the foundations of slavery and cash crop plantations.

Early agricultural experiments which involved olives, grapes, silkworms, and oranges were less than successful. While the Indian trade was profitable to many of the Carolina colonies, it did not provide the Proprietors with the wealth they expected from the new colony. This trade was also limited since the Indian population was so dramatically reduced by European disease, the sale of alcohol, and slavery.

Cattle raising also was an easy way to exploit the region's land and resources, offering a relatively secure return for very little capital investment. Few slaves were necessary to manage the herd. The mild climate of the low country made winter forage more abundant and winter shelters unnecessary. The salt marshes on the coast, useless for other purposes, provided excellent grazing and eliminated the need to provide salt licks. More interior swamps found similar vegetation and provided a constant water supply (Coon 1972; Dunbar 1961). Production of cattle, hogs, and sheep quickly outstripped local consumption and by the early eighteenth century beef and pork were principal exports of the Colony to the West Indies (Ver Steeg 1975:114-116). This allowed the ties between Carolina and the Caribbean to remain strong, and provided essential provisions to the large scale, single crop plantations.

Rice and indigo both competed for the attention of Carolina planters. Although introduced at least by the 1690s, rice did not become a significant staple crop until the early eighteenth century. At that time it not only provided the Proprietors with the economic base the mercantile system required, but it was also to form the basis of South Carolina's plantation system — slavery.

South Carolina's economic development during the pre-Revolutionary War period involved a complex web of interactions between slaves, planters, and merchants. By 1710 slaves were starting to be concentrated on a few, large slave-holding plantations. By the close of the eighteenth century some South Carolina plantations had a ratio of slaves to whites that was 27:1 (Morgan 1977). And by the end of the century over half of eastern South Carolina's white population held slaves. With slavery came, to many, unbelievable wealth. Coclanis notes that:

> on the eve of the American Revolution, the white population of the low country was by far the richest single group in British North America. With the area's wealth based largely on the expropriation by whites of the golden rice and blue dye produced by black slaves, the Carolina low country had by 1774 reached a level of aggregate wealth greater than that in many parts of the world even today. The evolution of Charleston, the center of the low-country civilization, reflected not only the growing wealth of the area but also its spirit and soul (Coclanis 1989:7).

Only certain areas of the low country, however, were suitable for rice production. For James Island the earliest staple crop was likely indigo, which would thrive on the moist loamy soils of the island.

By 1730 the majority of the population of the colony, both rural and urban, was black (Wood 1974). Charleston was the mecca around which the economic, political, and social world of Carolina revolved. Charleston provided the essential opportunity for conspicuous consumption, a mechanism which allowed the display of wealth accumulated from the plantation system.

Settlement on James Island at the time of the

American Revolution was sparse. A map prepared at the time of the Revolution reveals no settlements in the vicinity of the project area, although Col. Rivers is shown to the north and an unnamed settlement is shown further to the west, on one of the island's major roads (Figure 6).

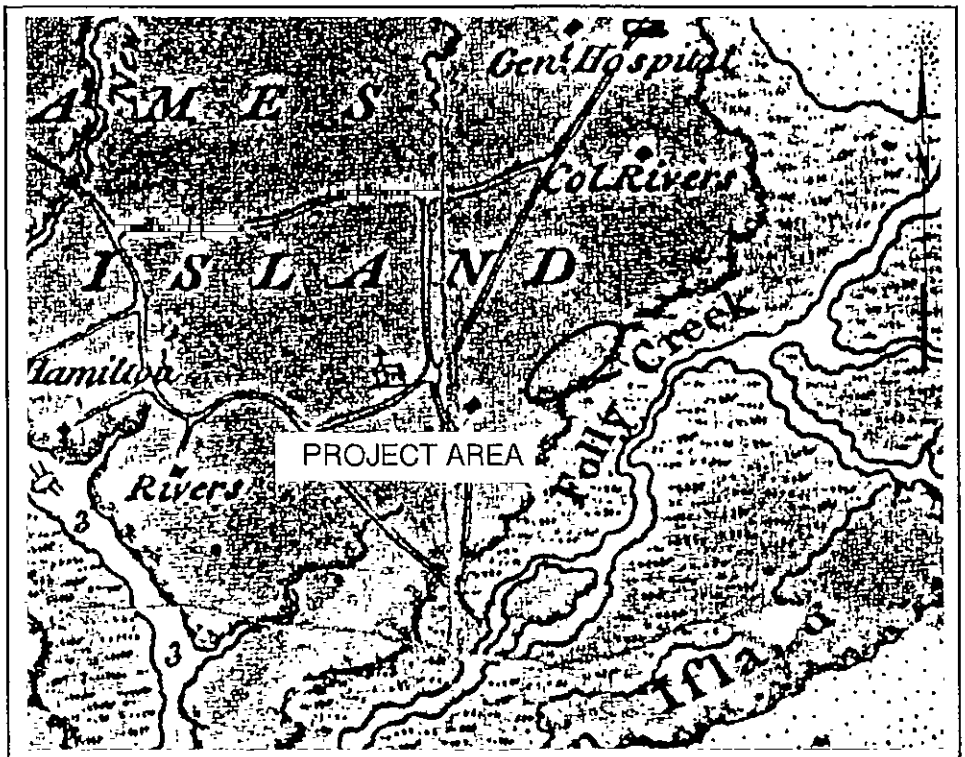


Figure 6. Portion of "Sketch of the Environs of Charlestown in South Carolina" during the American Revolution (National Archives, RG 77, Map I-14).

The study tract could not, with certainty and within the time allotted, be traced back further than the ownership in the second decade of the nineteenth century by S.H. Price. Price was apparently a small planter, owning a relatively small tract. It may have been acquired in 1818 from the estate of William Rivers (Charleston County RMC, DB X8, page 381), although this is far from certain without additional research. Nevertheless, Elizabeth C. Price, the widow and sole executor of S.H. Price, sold 100 acres to Henry S. Rivers in 1826 (Charleston County RMC, DB R9, page 183), holding a mortgage which was eventually paid off. A survey of this property, made about this time by J.L.E.W. Shecut (later written Stewart) could not be identified during this research, although it, too, may come to light with further examination. By 1830 there are six Rivers listed in the Federal Census for the immediate Charleston area — E.H., Mrs. George, John, Mary G., Stephen, and William H. — so without additional research it is impossible to speculate on how the tract might have been used.

Nevertheless, Rivers held the property throughout his lifetime, passing it on to his heirs (Charleston County WPA Wills, Vol. 37, page 227). They sold the tract (along with two others, totaling 195 acres) shortly thereafter, in 1839, to Doctor Thomas Legare (Charleston County RMC, DB Z10, page 148). At that time the tract was described simply has having been previously surveyed by Shecut and consisting of 100 acres. Although Thomas Legare was the author of at least one paper on the benefits of land quarantine, little else was immediately identified concerning either medical practice or planting activities on James Island. A Legare is listed in the 1830 census for St. Johns Colleton, but by 1840 is shown in Charleston's Second Ward. Then, in 1850 and again in 1860, Thomas Legare is listed in St. Andrews Parish, suggesting that he may have been residing at a James Island Plantation. He held the property throughout his life, apparently passing it to his heirs, including Joseph Taylor and Thomas Legare.

Mills' *Atlas* reveals that most of the island's settlement since the Revolution continued to be focused on the interior road network. By the second decade of the nineteenth century the previous four settlements

south of James Island Creek (Col. [Robert] Rivers, Rivers, Hamilton, and the unnamed settlement) had increased to 10 (including Price, Harvey, Lawton, Holmes, Turnbull, and no less than five Rivers) (Figure 7). Far more detailed, however, is the map prepared by Bache between 1823 and 1825 — about the same period as Mills' *Atlas*. Bache's map, at a much greater scale, provides excellent detail on creeks, land use, and settlements. Although there is some edge damage, the project area is shown as primarily

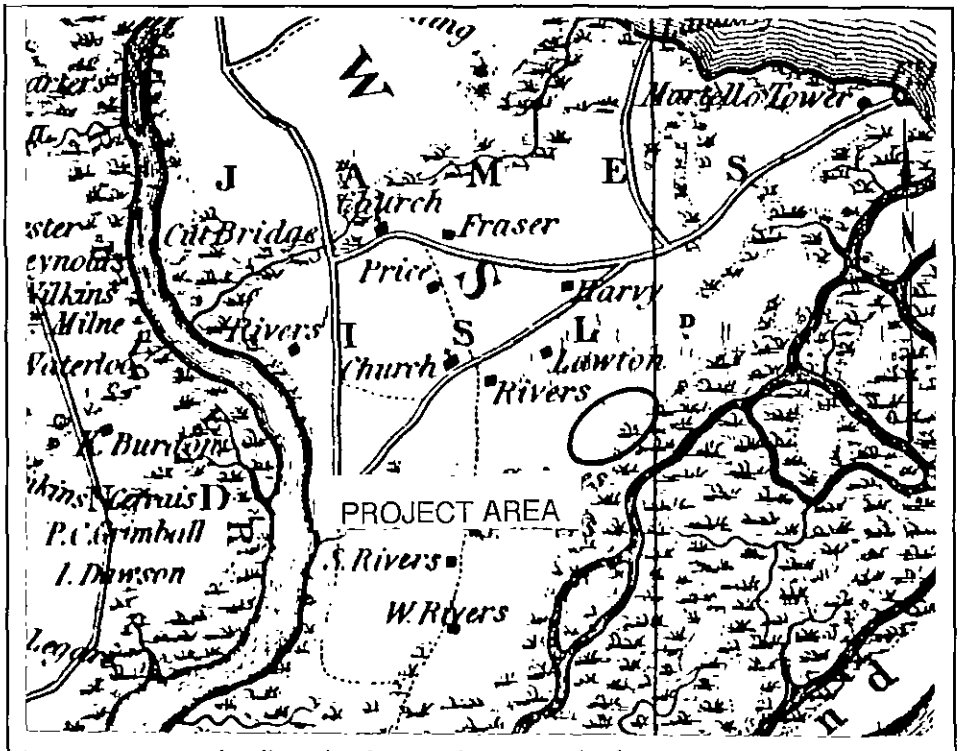


Figure 7. Portion of Mill's *Atlas* showing the James Island area in 1825.

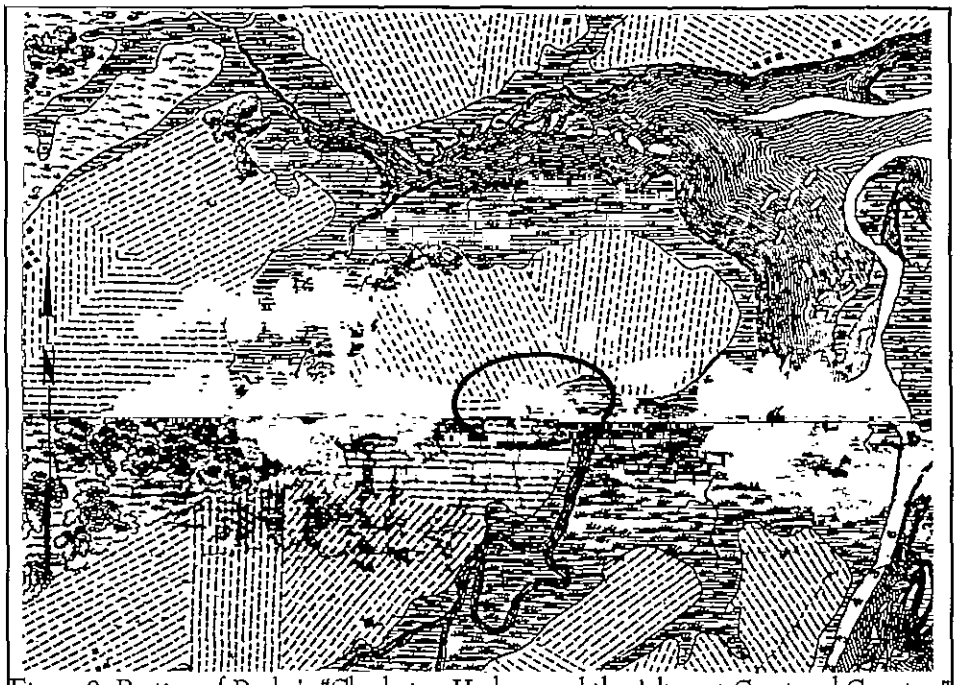


Figure 8. Portion of Bache's "Charleston Harbour and the Adjacent Coast and Country," 1823-1825 (National Archives RG 77, Map I-17)

cultivated (with a little tree growth at its western edge). There are no settlements in the immediate area, suggesting that the relatively small tract held by first Price and later Legare, was used for farming, but was not an important enough holding to warrant a settlement (Figure 8).

The Civil War

The Civil War history of James Island has recently been discussed at length by several authors. In particular, Brennan (1996) provides a

detailed account of Secessionville battle and of the events leading up to it. Burton (1970) and Rosen (1994) help place the local events in a much wider perspective. Gragg (1994), Jones (1911), and Power (1992) provide thorough secondary accounts of the actual Battle of Secessionville — the only action which the project area saw during the Civil War. Most recently we conducted archaeological investigations at a portion of Secessionville and that account helps to synthesize all of these earlier works (Trinkley and Hacker 1997).

With the election of Lincoln and the fall of Fort Sumter, the Civil War began. But it was the fall of the Confederate positions around Hilton Head and Beaufort, coupled with the Union blockade of the coast which made the South realize its vulnerability. Shortly afterward the little known General Robert E. Lee arrived in Charleston to assume command of the new military department of South Carolina, Georgia, and East Florida. Lee established his command at Coosawhatchie, on the line of the Charleston and Savannah Railroad. His strategy, in the words of Rosen was:

> to concede the immediate coast (a move that did not sit well with the planters of the area) except for the forts guarding Charleston and Savannah, which he greatly improved; to obstruct all the waterways between the two cities not already occupied by the Union navy; and to protect the railroad (Rosen 1994:83).

As the Union forces delayed, Charleston continued to strengthen its defenses. Lee placed General Roswell S. Ripley over the Charleston district. By March 1862 Lee was replaced by Major General John C. Pemberton, an individual almost universally disliked by Charlestonians. Rosen notes that Pemberton relieved Ripley of his command and was never able to get along with South Carolina's Governor Pickens. Soon Charleston was under martial law and the local paper cried that this was "grievous and intolerable oppression — an unreasonable and tyrannical measure" (quoted in Rosen 1994:89).

In spite of the measures taken by Lee, Ripley, and then Pemberton, the large rivers of coastal South Carolina were a serious weakness in the defense of Charleston since they allowed numerous entrances and routes of movement — most difficult to protect or defend. Coupled with this natural weakness, Pemberton decided to draw his defenses inward toward Charleston, and abandoned the fortifications at Cole's Island on the Stono Inlet. Combined, these two were seized by the Federal navy, which began a gradual movement up the Carolina coast from Port Royal, first to Cole's Island, to Edisto Island, to Seabrook Island, then to John's and Kiawah islands, then finally digging in on Folly Island. This created a staging area for the assault on Charleston.

Among the Confederates' greatest fears was that the Union army would launch an assault on James Island, since if it fell, artillery batteries on the island would almost certainly lay waste to the inner harbor defenses. As a result, extensive defensive batteries began to be erected on James Island. On May 29, 1862, under the increased threat of invasion by Union forces, Major John G. Pressly, commander of the Eutaw Regiment (25th S.C. Volunteer Infantry) at Secessionville (to the south of the project area, on the opposite side of Seaside Creek)and Provost Marshal for James Island, ordered that the island be evacuated. The notice in the Charleston *Mercury* instructed the planters to remove all private property, including slaves. Corn, fodder, and livestock would be purchased by the Quartermaster and used for provisioning troops then protecting Charleston.

As Figure 9 reveals, the Charleston defenses on James Island consisted of forts, lines of earthworks, and rifle pits ringing the island and creating a series of defensive positions. The initial inner (or east) defenses, were recognized by 1863 as inadequate and a second line, often called the western or siege lines, were constructed. This line consisted of a series of six batteries, connected by trenches and rifle pits.

Of greatest concern, of course, are those positions or activities in the vicinity of the Seaside Plantation tract. Unfortunately, the maps available for the Battle of Secessionville, while seemingly accurate for the immediate area of the fighting, tend to be fairly

inaccurate further away. For example, the Caper's map (illustrated by Trinkley and Hacker 1997:Figure 16) distorts the various peninsulas, placing one between Secessionville and Seaside which does not actually exist. General Stevens' map of the battle, while more topographically accurate, misplaces the Confederate Battery Reed (illustrated by Trinkley and Hacker 1997:Figure 17). As a result, these maps probably should not be relied on to help us understand what was happening in the project area.

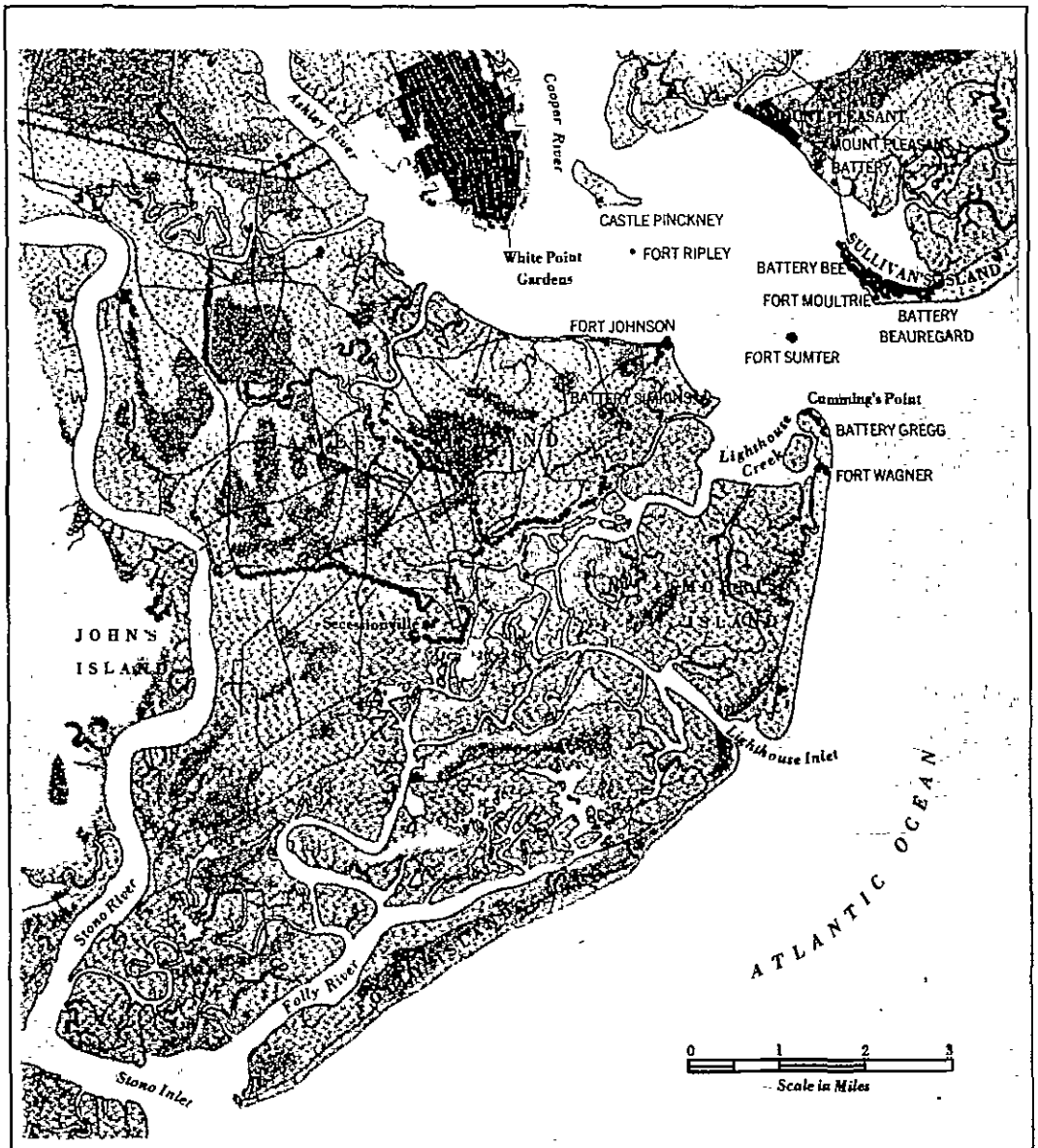


Figure 9. Works on James Island for the defense of Charleston (adapted from Woodhead 1997:37)

Figure 10, however, illustrates the defenses existing by late 1863. Although there are no structures shown on the Seaside Peninsula there is a ring of defensive earthworks at its eastern edge, facing the marsh. Comparison with Figure 3 reveals that these were still present as late as 1977 (recognizable by the distinctive alignments of tree growth on the marsh edge). There was also another line of earthworks, set up as a cremaillerre or indented line running north-south from Seaside Creek northward to the sound. These seem to have served to protect the bridge access to Secessionville. Figure 3 reveals that nothing of this line

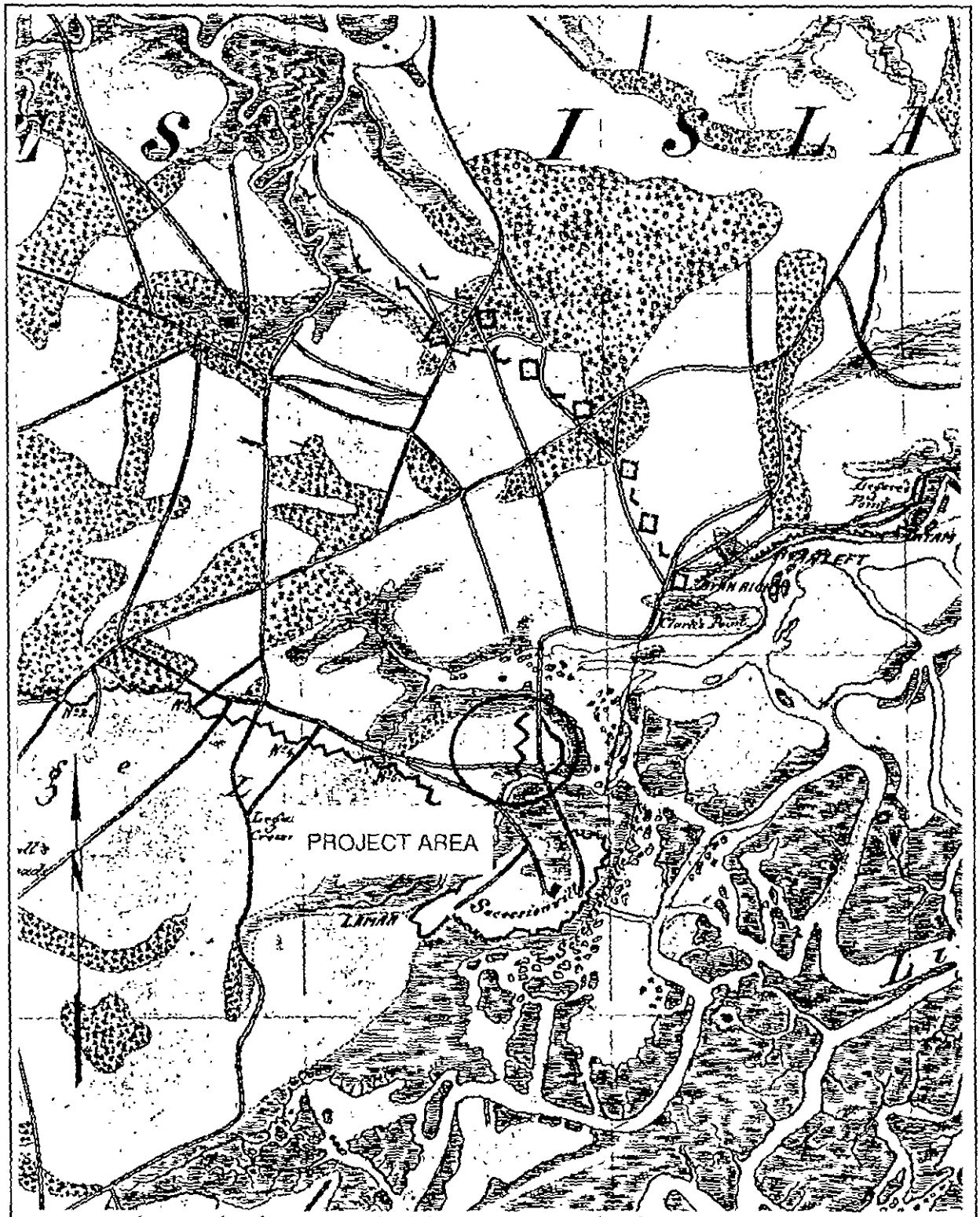


Figure 10. Civil War earthworks on James Island about 1863 (National Archives, RG 77, Map I-58-1).

remained above ground in the mid- to late twentieth century. Based on experience at Secessionville, it is likely that the lines, in the way of agricultural activities, were quickly filled and planted over.

Figure 3, however, does reveal the location of the western or siege lines (also a cremaillerre or indented line) as they tie into Seaside Creek to the west of the study tract. Battery 5 of this line is still extant, just inside the gates of Seaside Plantation development, and is owned by the S.C. Battleground Preservation Trust.

It appears from the available maps that the study tract is immediately west of the north-south line of earthworks and even further removed from the western or siege line. Given the imprecise nature of mapping and recordation, however, it remains possible that some earthworks may be in the general area.

Postbellum Developments

After the Civil War the property was held as half-interests by two different individuals. Morris Cantor was described in the deeds as a "bachelor of the City of London," while John L. Maccaulay (also spelled Macaulay) was a resident in the City of New York. It is not entirely clear when or from whom they obtained the property, although it is likely that it was purchased as local planters — perhaps the Legare's — fought off bankruptcy.

Although we have been unable to identify any information on these individuals during this quick overview, the other tracts they purchased include the McLeod Plantation (also on James Island), so it is possible that Historic Charleston Foundation, because of their oversight of the McLeod tract, may have additional information.

Regardless, by the end of the Civil War South Carolina's economy was in shambles. Planters attempted to quickly return to cotton in the hopes of restoring some semblance of wealth and prosperity, but frequently found that the freedmen were little interested in returning to cotton.

A map of the general area, prepared in 1866 (Coast Chart 53, "Coast of SC from Long Island to Hunting Island"), fails to identify any structures, suggesting that it was still used exclusively for farming.

By the early 1880s there were only two major agricultural producers in Charleston County — the Charleston Neck, which focused on truck farming fruits and vegetables, and James Island, where cotton was still king (Anonymous 1884).There were 21 plantations operated on James Island by white owners, totaling 6,000 acres. In addition, there were 16 farms operated by African Americans (although the latter tended to average between 10 and 20 acres each). By this time field labor consisted entirely of African Americans, described as "more [efficient] than five years ago, inasmuch as the negro is now settled and less changeable" (Anonymous 1884). The normal day was 9 hours and the pay was $10/month plus rations for wage hands. Women were rarely hired, but when they were the daily pay was 50¢. More blacks were employed using a modified system of tenancy. The plantation owner provided housing and 4 to 5 acres for the use of the tenant, who in turn provided 2 days of labor during the 10 month cotton year — seemingly one of the more benevolent forms of tenancy found in South Carolina at the time.

In 1879 Maccaulay sold his half interest in several tracts to W.G. Hinson and Robert Bee for $6,000 (Charleston County RMC, DB S17, page 146). One of these tracts (identified as No. 3) was for 100 acres and was identified only as the Sterling Rivers Tract — but there was a note that it had been surveyed by J.L.E.W. Stewart who is almost certainly the Shecut referred to by Price's deed 53 years earlier. The Sterling Rivers mentioned by the deed is Henry S. Rivers.

A few months later Morris Cantor also sold his interest in the property to Hinson and Bee — again for $6,000 (Charleston County RMC, DB S-17, page 422). This deed, however, does confirm the 100 acre tract is the same that was passed from Price to Henry Sterling Rivers, and then from Rivers to Thomas Legare.

Bee and Hinson were two of James Island's Confederate veterans — William Godber Hinson was born in 1838 and served as a lieutenant colonel in Company G of the 7th South Carolina Cavalry, while

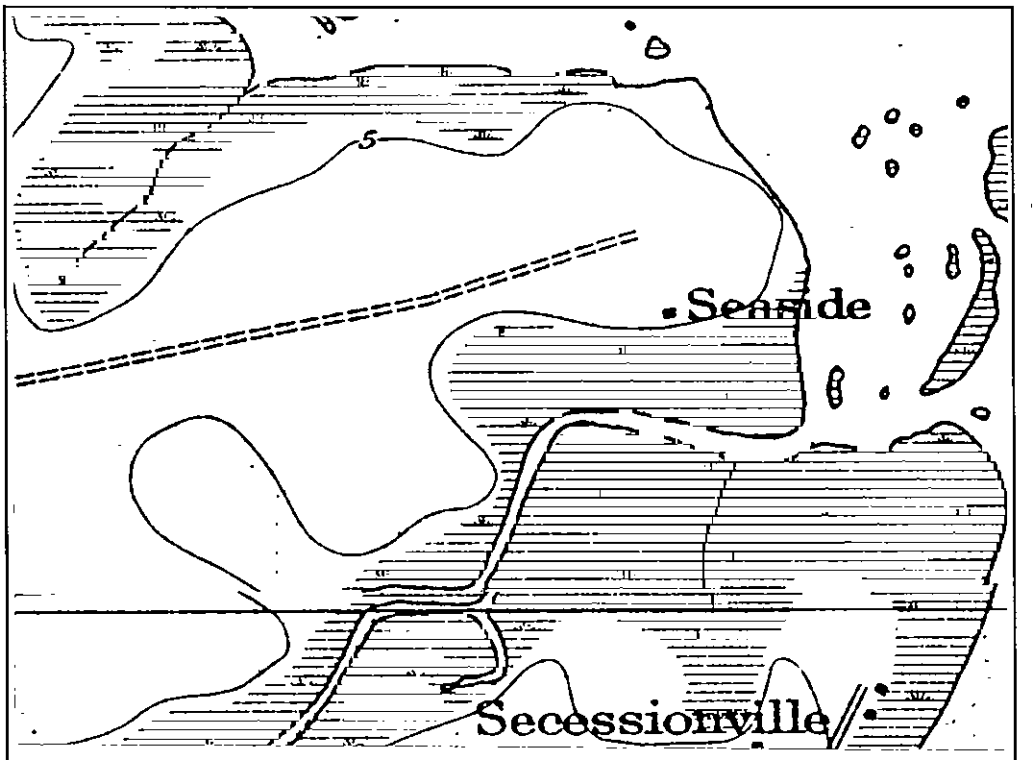


Figure 11. Portion of the 1919 James Island topographic map showing the Seaside Plantation area.

Robert Bee was born in 1839 and served as a sergeant during the Civil War (Hayes 1971: 21; Hemphill 1908:204). Hinson, who after the Civil War took up his father's agricultural interests, was a major planter on James Island, recognized as a "pioneer in practical agricultural drainage and in the use of commercial fertilizers in South Carolina" (Hemphill 1978:204).

South Carolina families tend to be notoriously interconnected, especially in the Charleston area, but it is interesting that Hinson's mother was Juliana Rivers. This may have given him some particular interest in the property since it seems that otherwise the 100 acres was of little agricultural importance.

In 1888 Robert Bee and William G. Hinson chose to divide their interest in the Legare/Rivers property, with Bee selling 97 acres to Hinson for the sum of $5 (Charleston County RMC, DB E18, page 151). By this time the property was known as the Stonefield Tract. Hinson held the property for the remainder of his life and, when he died in 1919, a life estate in the property was devised to Sandiford Bee (Charleston County Probate Court, File 565-24). When Bee died in 1929 the property passed to his two children, Elizabeth B. LaBruce and S. Stiles Bee.

It is also on the 1919 edition of the James Island topographic map (Figure 11) that a settlement first appears in the vicinity of the study tract. Oral history, however, suggests that this structure was actually the second one on the property and was built in 1908 to replace an earlier structure which burned down. The original house, although not well documented, may have been built about the time Bee and Hinson divided their interest in the property, perhaps around 1888-1890.[1] As the story goes, the house was being rebuilt slightly to one side of the ruins, when for some reason

[1] Oral history, however, claims this is the Sandiford Bee House (Sarah Fick, personal communication 2000). If this is the Sandiford Bee (1845-1864) who was the younger brother of Robert Bee, it would place the house far too early based on other records. On the other hand, if it refers to the Sandiford Bee who acquired the property through Hinson's will, the house would not have been constructed until sometime after 1919 and before 1929 — which seems too late. We are inclined, at this stage of research, to believe that the original structure was probably built by either Robert Bee or even W.G. Hinson.

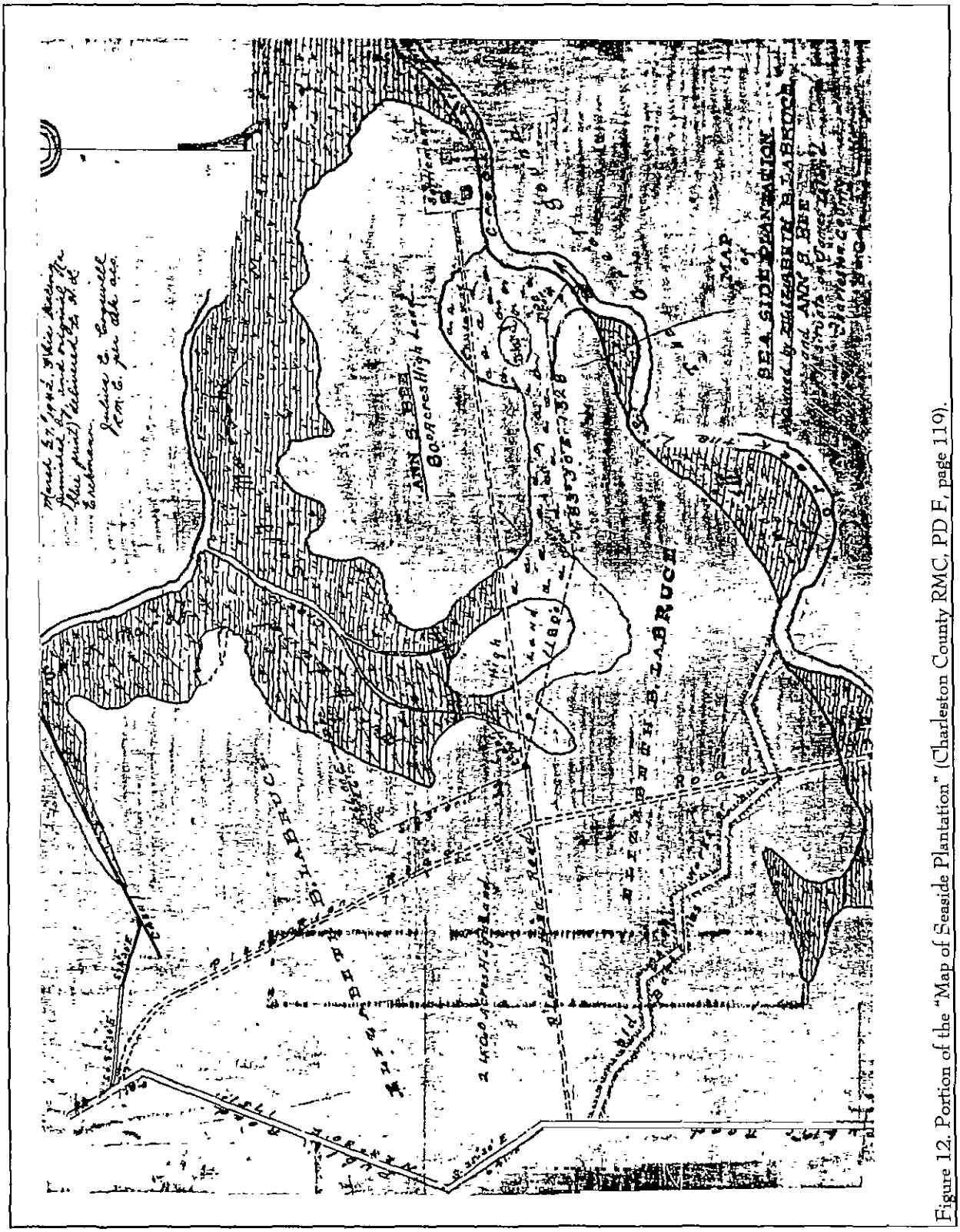


Figure 12. Portion of the "Map of Seaside Plantation" (Charleston County RMC, PD F, page 119).

the decision was made to move it back to the original site — resulting in the 1908 house being built on the foundations of the original structure (Sarah Fick, personal communication 2000).

In 1939 a plat was prepared showing the Bee property, with the study tract including a portion of the 40 acres designated to Ann S. Bee (Figure 12). The island in the marsh on the 1939 plat is the same island shown in Figure 2. The plat also reveals a sizable settlement at the extreme eastern end of the property. Consisting of at least four buildings, it was placed on the creek edge. This would have been in the vicinity of where Civil War maps reveal that a bridge had been built to connect Secessionville with the main part of James Island. Today it is an area of dense brick deposits in the marsh and along the bank. Oral history indicates that this was used by Bee as a landing (Sarah Fick, personal communication 2000).

Although misdrawn on the 1919 topographic map, the 1939 plat reveals that the main plantation road crossed the marsh on a causeway and terminated at the Bee settlement. As will be discussed in the archaeological study, the remains of this causeway are still found in the marsh.

The plat also reveals the remains of the western or seige line on James Island that terminated on the Seaside Creek. Identified as "Old Earthworks or Batteries" they apparently extended to at least the "public road" or what is today (albeit considerably straightened) Folly Road. As late as 1978 Hayes remarked that:

> In the woods on Seaside Farm, much of this earthworks is still today hidden in the woods. Seaside Farm today inhabits Bee's Penninsula (Hayes 1978:110).

Although the plat indicates that it was drawn to illustrate a division of land between Elizabeth LaBruce and Ann S. Bee, it wasn't until 1948 that a deed for the division was actually executed and recorded (Charleston County RMC, DB K43, page 201). At that time LaBruce and S. Stiles Bee sold Ann S. Bee, the wife of Stiles Bee, 80 acres of highland "including the portion marked settlement and all buildings thereon," for $100. LaBruce acquired the 240 acres to the west and south.

Ann S. Bee maintained ownership until 1972 when she sold the parcel, at that time identified as 92.28 acres, to Stonefield for $253,770. Stonefield was the name of a development partnership at that time controlled by Orvin Mortgage Company. In 1987 Stonefield sold the property to FKS Properties for $1 and 300 shares of FKS Properties stock, then valued at $33,000. Since that time much of the property has been extensively developed, although a portion was acquired by Dr.Bert Pruitt, initially as a partner with other developers and eventually as a sole owner.

Previous Investigations

There have been a number of archaeological studies conducted in the James Island area and we have already mentioned Chicora's investigations of a portion of Secessionville (Trinkley and Hacker 1997). The interest in this area, however, goes back to at least 1978. At that time Dr. Donald Sutherland, then SHPO Archaeologist, visited the vicinity and collected a range of materials from the surrounding cultivated fields, described as "low lying open fields with thin scatter of cultural material - some recognizable concentrations (though they are sparse) - some areas devoid of remains. Much of the area low and poorly drained" (38CH507 site form). He identified site 38CH507 as covering an area of about 80 acres, although the boundaries he identified actually encompassed nearly 200 acres. The site is bounded to the north by a small tidal drainage, to the east by Clark Sound, to the south by Seaside Creek, and to the west by Secessionville Road.

Sutherland does not mention the siege lines in the site form. As curious as that might seem today, in 1978 it was common practice to walk open, cultivated areas and rarely venture into areas covered with thickets. In addition, archaeological interest in Civil War sites was relatively uncommon, so there was likely no research conducted on the presence of any earthworks. Regardless, Sutherland recommended that 38CH507 was not eligible for inclusion on the National Register of Historic Places.

As interest grew in Civil War history and archaeology, Battery 5 was listed on the National Register of Historic Places in 1982. In 1991, Dr. Linda Stine revisited the site. Being primarily interested in the integrity of the earthworks, she redefined the boundaries to include only the siege line and Battery 5 — an area measuring about 2,700 by 100 feet. Regardless, the earlier boundary definitions are still shown on the topographic maps of the South Carolina Institute of Archaeology and Anthropology since they refer to materials collected by Sutherland years before.

Additional investigations in and around these lines were conducted by Chicora Foundation (Adams 1994a, 1994b; Trinkley 1994).

An architectural survey of James and Johns islands was conducted by Preservation Consultants (Schneider and Stockton 1989), however the study area was not included since it was on private property and not accessible from public roads. Recently a conservation easement on the property was taken by Historic Charleston Foundation, but no historic research on the property has been conducted (Jonathan Posten, personal communication 2000).

METHODS

Background Investigations

Prior to conducting this investigation we contacted the State Historic Preservation Office for any information on National Register buildings, districts, structures, sites, or objects in the study area, as well as the results of any structure surveys which may have been completed in the project areas (fax to Dr. Tracy Power, dated December 7, 1999). He reported that there were no National Register sites in the immediate project area. As a follow-up we contact Mr. Dan Vivian at the S.C. Department of Archives and History concerning any information his office might have on the standing structure east of the survey tract. They had no information on the structure and verified that it was included in the previous James Island survey (Schneider and Stockton 1989).

We also contacted the S.C. Institute for Archaeology and Anthropology for information concerning any previously recorded archaeological sites in the immediate survey area. As previously discussed, the only site in the immediate project area was 38CH507.

Since the Historic Charleston Foundation maintains a conservation easement on the property we also contacted Mr. Jonathan Poston concerning any information his organization might have in their files concerning the property, its previous history, or the historic structure on the property. He indicated that they had not done any research on the property, although they had assumed that the current structure was built to replace an earlier one which had burned.

Field Methods

The initially proposed field techniques involved the placement of shovel tests at 100 foot intervals along transects spaced at 100 foot intervals. In areas of standing water or wetlands no shovel tests would be excavated.

All soil would be screened through ¼ inch mesh, with each test numbered sequentially along numbered transects. Each test would measure about 1 foot square and would normally be taken to a depth of at least 1.0 feet. All cultural remains would be collected, except for shell, mortar, and brick, which would be quantitatively noted in the field and discarded. Notes would be maintained for profiles at any sites encountered.

Should sites (defined by the presence of two or more artifacts from either surface survey or shovel tests within a 25 feet area) be identified by shovel testing, further tests would be used to obtain data on site boundaries, artifact quantity and diversity, site integrity, and temporal affiliation. These tests would be placed at 25 feet intervals in a simple cruciform pattern until negative shovel tests were encountered. The information required for completion of South Carolina Institute of Archaeology and Anthropology site forms would be collected and photographs would be taken, if warranted in the opinion of the field investigators.

In addition, we proposed to conduct a brief, essentially reconnaissance level, metal detector survey of several areas on the tract. This was to determine if materials were recovered that suggested a more intensive program might be worthwhile. Our concern was that Civil War military artifacts might be present and that often these are not identified in traditional shovel testing programs.

This strategy was implemented with no significant modifications. The tract, except for the wetland area, had been recently bush hogged. This allowed good to excellent access to almost all areas for both shovel testing and also metal detecting (see Figure

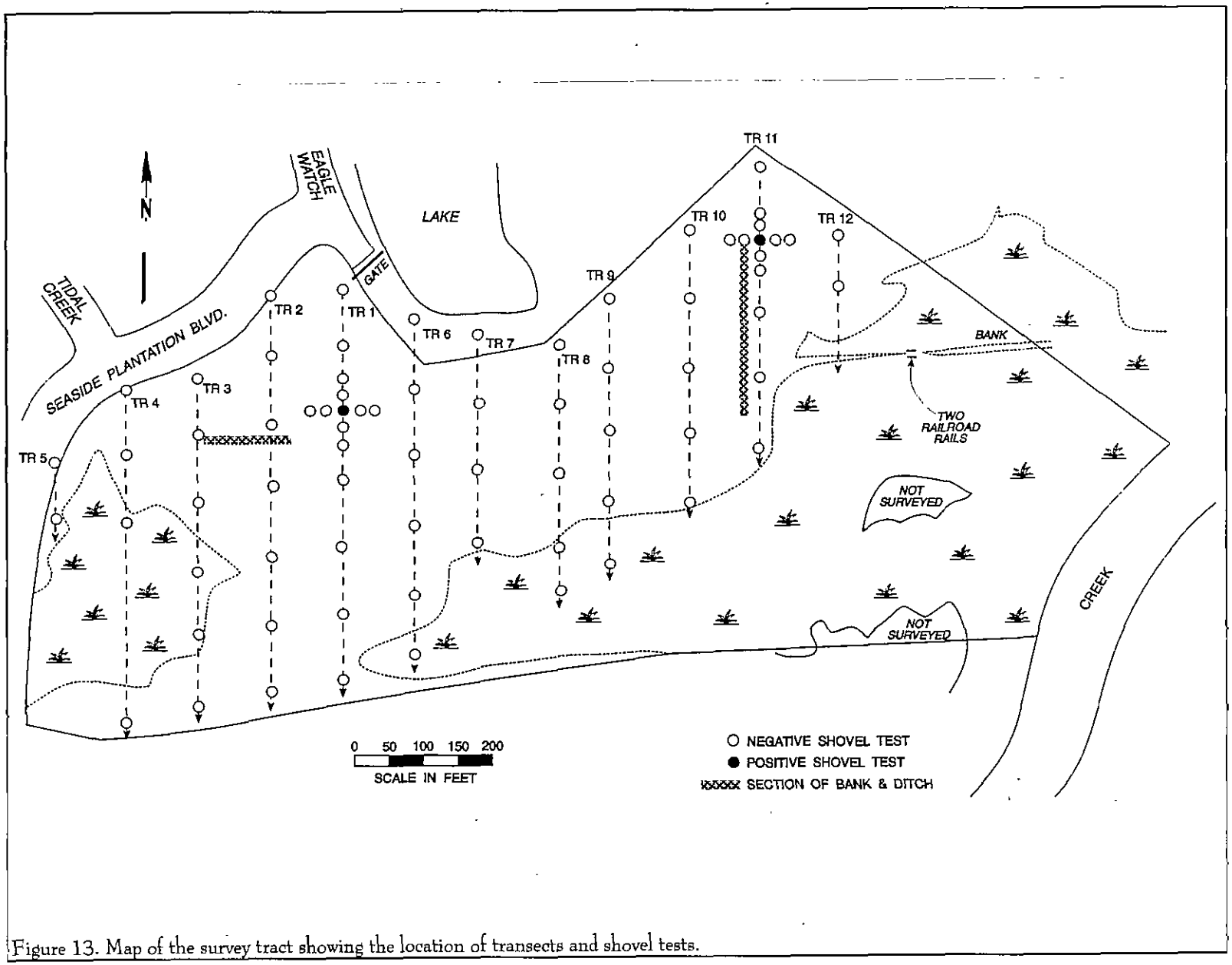


Figure 13. Map of the survey tract showing the location of transects and shovel tests.

4). A series of 12 transects were laid out along the northern edge of the property, all running from north to south. Transect 1 began at the gated entrance to the property and Transects 2-5 were placed to the west. Transects 6-12 were placed to the east. A total of 58 shovel tests were excavated on these transects (Figure 13). On several of these transects (specifically Transects 4, 5, 6, 8, and 9) one or more shovel tests extended slightly into what was identified as marsh or wetland areas in order to verify that the soils were, in fact, wet and likely unsuitable for prehistoric or historic occupation. In all such cases the wet nature of the soils were verified.

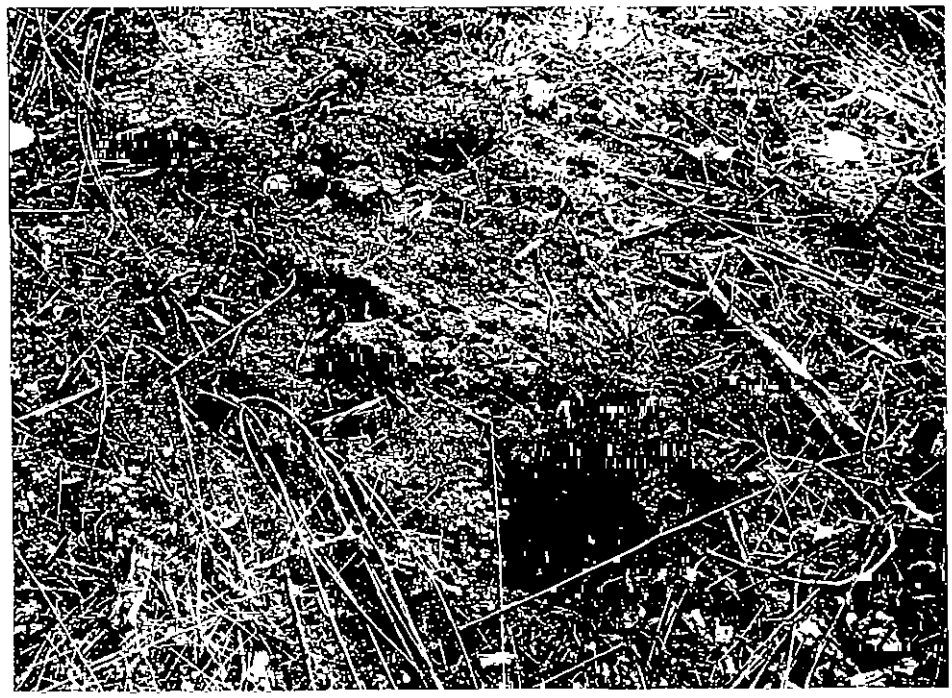


Figure 14. Example of metal detector looting hole on the survey tract.

All areas of the property were investigated except for the small island situated in the marsh southeast of the main tract. The high tides prevented access at the time of this study; in addition, this tract, being small and situated without access, is not amenable to development. Moreover, it is likely that the OCRM setback lines would prohibit any development. Therefore we do not anticipate that this is a serious concern.

The metal detector survey was conducted in three areas, each measuring about 100 feet square. These were situated in areas where the bush hogging had done the most effective job at clearing out the brush which otherwise entangles metal detectors as they are "sweeping" the ground. One search area was situated immediately inside the gated entrance; another was situated immediately south-southwest; and the third was situated to the southeast.

A Tesoro Bandido II™ using an 8-inch concentric coil (electromagnetic type operating at 10KHz) was used for this study. The instrument has the capability to operate in either an all metal mode or discriminate mode (which eliminates ferrous metal response). The all metal mode is the industry standard VFL type which does not require motion of the search coil for proper operation. The discriminate mode is based on motion of the search coil, but allows control over the detector's response to ferrous metals. Since our goal was to examine the possibility of identifying Civil War materials in this area, we chose to eliminate ferrous response and focus on items which might be brass or lead. This mode, of course, also detects aluminum — which proved to be all that was recovered in the different areas. Identified items include pop tabs, several modern coins, foil wrappers, and several modern shotgun shells. These materials were not retained.

We did observe several areas on the property where at least two different metal detector collectors had been operating on the property (Figures 14 and 15). We identified at least nine holes, none of which had been backfilled. Although this indicates that collectors,

probably looking for Civil War materials, had identified the site as being recently cleared, the relatively few holes also suggests that they, too, had little success and soon gave up the "hunt."

In addition to the shovel tests and metal detector survey, we also conducted a brief pedestrian survey of the marsh edge. In all areas the ground slopes gradually down to the marsh and there is no well defined bank.

Since the standing architectural site to the east of the project had not been officially recorded in the statewide architectural survey, information sufficient to complete a survey card for the house was collected by Ms. Sarah Fick of Preservation Consultants.

Site Evaluation

Identified sites would be evaluated for further work based on the eligibility criteria for the National Register of Historic Places. Chicora Foundation only provides an opinion of National Register eligibility and the final determination is made by the lead federal agency (perhaps OCRM) in consultation with the State Historic Preservation Officer at the South Carolina Department of Archives and History.

The criteria for eligibility to the National Register of Historic Places is described by 36CFR60.4, which states:

> the quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and
>
> a. that are associated with events that have made a significant contribution to the broad patterns of our history; or
>
> b. that are associated with the lives of persons significant in our past; or
>
> c. that embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
>
> d. that have yielded, or may be likely to yield, information

Figure 15. Example of metal detector looting hole on the survey property.

important in prehistory or history.

National Register Bulletin 36 (Townsend et al. 1993) provides an evaluative process that contains five steps for forming a clearly defined explicit rationale for either the site's eligibility or lack of eligibility. Briefly, these steps are:

- identification of the site's data sets or categories of archaeological information such as ceramics, lithics, subsistence remains, architectural remains, or sub-surface features;
- identification of the historic context applicable to the site, providing a framework for the evaluative process;
- identification of the important research questions the site might be able to address, given the data sets and the context;
- evaluation of the site's archaeological integrity to ensure that the data sets were sufficiently well preserved to address the research questions; and
- identification of important research questions among all of those which might be asked and answered at the site.

This approach, of course, has been developed for use documenting eligibility of sites being actually nominated to the National Register of Historic Places where the evaluative process must stand alone, with relatively little reference to other documentation and where typically only one site is being considered.

For architectural sites the evaluative process was somewhat different. There we have focused on evaluating these sites using National Register Criterion C, focusing on the site's "distinctive characteristics." Key to this concept is the issue of integrity. This means that the property needs to have retained, essentially intact, its physical identity from the historic period.

Particular attention was given to the integrity of design, workmanship, and materials. Design includes the organization of space, proportion, scale, technology, ornamentation, and materials. As *National Register Bulletin* 36 observes, "Recognizability of a property, or the ability of a property to convey its significance, depends largely upon the degree to which the design of the property is intact" (Townsend et al. 1993:18). Workmanship is evidence of the artisan's labor and skill and can apply to either the entire property or to specific features of the property. Finally, materials — the physical items used on and in the property — are "of paramount importance under Criterion C" (Townsend et al. 1993:19). Integrity here is reflected by maintenance of the original material and avoidance of replacement materials.

Perhaps more complex than assessing the eligibility of the architectural sites is evaluating the affect of the proposed undertaking. The affect on archaeological resources is relatively clear since we have traditionally focused on primary or direct affects — either the archaeological site will be within the development tract and damaged by clearing, grubbing or other construction activities. In the case of historic resources such as buildings, often the more significant issue is whether there will be some level of visual intrusion.

Visual intrusion may take a variety of forms. For example, the new development may be inconsistent with the historic structure in terms for mass or scale. Or it may exhibit characteristics which are out of place or conflicting with the existing architecture. To address such issues it is often appropriate to determine if there is intervening vegetation or other screening, and to evaluate issues such as scale by determining the distance the new development will be from the existing property.

Clearly quantification of this visual intrusion, regardless of the questions asked, is far from precise — what seems "looming" to one person can be entirely undisturbing to another and vice versa. Nevertheless, we believe that this begins to provide some quantification to an otherwise difficult issue.

Mitigation measures are not quite as difficult to address and may include ensuring that there is a barrier of vegetation, that density of the proposed development is low, and so forth.

Laboratory Analysis

The cleaning and analysis of artifacts was conducted in Columbia at the Chicora Foundation laboratories. These materials have been catalogued and accessioned for curation at the South Carolina Institute of Archaeology and Anthropology, the closest regional repository. The site form for the identified archaeological site (discussed in the following section of this report) has been filed with the South Carolina Institute of Archaeology and Anthropology. Field notes have been prepared for curation using archival standards and will be transferred to the South Carolina Institute of Archaeology and Anthropology as soon as the project is complete. The only photographic materials taken were color prints. Since these are not archival, they have been temporarily retained by Chicora Foundation. Analysis of the collections followed professionally accepted standards with a level of intensity suitable to the quantity and quality of the remains.

RESULTS

Background Investigations

As previously discussed, we have been informed by the S.C. State Historic Preservation Office that there are no National Register properties in the project area nor are there any previous architectural surveys applicable to the study tract (Dr. Tracy Power, personal communication 1999; Mr. Dan Vivian, personal communication 2000). Likewise, we have already discussed the results of our investigations at the S.C. Institute of Archaeology and Anthropology and the identification of 38CH507 on the survey tract. We also spent considerable effort examining the available information concerning the James Island siege lines and their current condition, using both historical documents, our previous surveys in the project area, and also the previously conducted surveys on James Island.

Results of the Archaeological Survey

The archaeological investigation of the survey tract revealed only two "concentrations" of artifacts.

In Shovel Test 2 on Transect 1, we identified a clear bottle glass fragment (see Figure 13). Additional shovel testing on the cardinal directions at 25 foot intervals revealed only one additional positive shovel test. The test to the east produced a 1973 coin, an aluminum pop tab, and another fragment of clear glass. Since all of these material are modern and the scatter is not associated with any further evidence of occupation, these materials were discarded and are not identified as an archaeological site.

In Shovel Test 2 of Transect 11 (see Figure 13) we identified one Deptford Cord Marked sherd (Figure 16), one orthoquartzite flake, and one nail fragment. Additional testing at 25-foot intervals out from this positive test failed to produce any additional materials.

The central UTM coordinates for these materials are E598900 N3619490. This material was recovered from an area which was originally plowed field, so the soil profile revealed about 1.1 foot of brown sand overlying a yellow sandy subsoil — a profile typical of the Kiawah soils in the area.

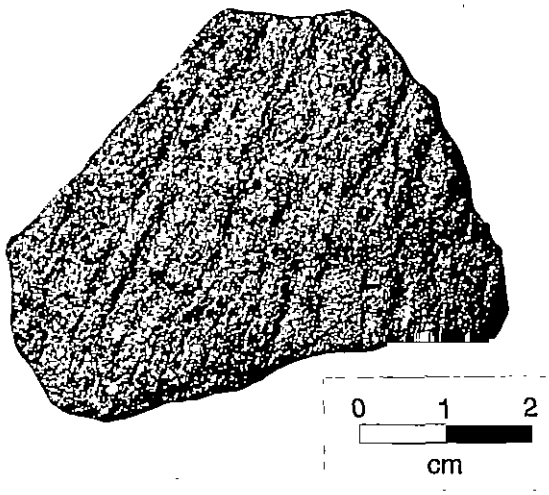


Figure 16. Deptford Cord Marked sherd recovered from Transect 11, Shovel Test 2.

Although really little more than an isolated find, this second "concentration" of materials was curated as part of the previously identified 38CH507 site. We believe that it is consistent with the scatter of historic and prehistoric materials which Sutherland originally identified as he walked the plowed fields of the Seaside or Stonefield Farm.

The materials possess no integrity and cannot address any meaningful research questions. Therefore this "concentration" or locus of 38CH507 is not

recommended as eligible for inclusion on the National Register of Historic Places. No further management activities are commended.

Figure 17. Remnant of the marsh causeway and road. View is to the west.

The Metal Detector Survey

Likewise, the metal detector survey failed to identify any materials other than modern remains (aluminum can fragments or pop tabs, foil wrappers, and modern shotgun shells). Although the entire parcel was not examined, this sample suggests that the plowed fields have incorporated a great deal of modern trash which will make metal detecting, at best, difficult or problematic. The fact that metal detector enthusiasts began and quickly ended their search of the property also suggests that few, if any, historic remains are present.

Moreover, our investigation of the historic maps of the area suggest that the nearest earthworks, probably situated to the east (perhaps in the vicinity of the Pruitt house or just west of it), were quickly filled in after the Civil War. Of course this does not mean that materials are not preserved below grade. In fact, our study at Secessionville (Trinkley and Hacker 1997) revealed that these earthworks, being large features, are easily detected. Nevertheless, the Secessionville works produced relatively few military remains, although they were significant to help document the construction and maintenance techniques of these fortifications.

As a result, we do not recommend any additional metal detector survey for the property. However, should development at some future time push to the east, additional effort should be made to identify and examine these earthworks.

The Pedestrian Survey

The survey of the marsh edge failed to identify any archaeological sites. The ground slopes very gradually into the marsh and the lack of a clearly defined bank likely discouraged Native American settlement. Furthermore, the marsh frontage is circumscribed and very small. It seems unlikely that it would have provided the variety of resources that access to somewhat deeper water might have. Consequently, it is far more likely that significant remains lie to the east, on the portion of the property still retained by the Pruitts.

The pedestrian survey, however, did identify the remains of the causeway which was originally built across the marsh (see Figure 12). Through time it appears that at least some of the marsh north of the causeway became more solid ground (see, for example, the modern topographic map). At some point, however, the causeway was breached and much of the marsh was restored. Figure 17 illustrates what is left of that causeway today, while Figure 18 illustrates one of the two railroad rails which were apparently incorporated into the causeway.

Figure 18. One of two railroad rails found in the marsh, associated with the old causeway. View is to the west.

Although this is an interesting feature — and one which is over 50 years old — we do not believe that it is a significant resource. Whatever can be learned from it has been documented as a result of this current study and we not recommend any additional investigations.

The pedestrian survey also identified two sections of bank and ditch on the survey tract (see Figure 13). One is situated in the western portion of the tract and is today about 1 to 2 feet in height and perhaps 20 feet in width. It runs east-west for about 120 feet, although it is very difficult to see on the landscape. This feature appears to be associated with a field line which ran along the access road (and which eventually crossed the causeway discussed above). It is also possible that this feature actually represents a portion of this original field road (with the road itself serving as the field line). Regardless, it is very low topographic feature.

The second field line is situated in the eastern portion of the tract (see Figures 13 and 19). This line runs due north-south for about 300 feet. It is about 3 feet in height and about 20 feet in width. The ditches on either side are far less pronounced, being perhaps 0.5 to 1 foot lower than the surrounding topography and generally having a very broad width. There are a number of older hardwoods on the bank and also a series of square fence posts (which run into the marsh). It seems clear that this was also a major fence line (shown on Figure 3) which may also originally have been a drain to ensure that the fields were kept dry for the cotton. Through time the bank (formed from the creation of

Figure 19. Bank and ditch feature in the eastern portion of the survey tract.

the ditches) has eroded back into the drainage ditches, creating the feature we see today.

These lines and roads are also interesting features of the Seaside Farm tract — and are almost certainly 50 years or older. Nevertheless, we do not believe that they are eligible for inclusion on the National Register. They lack integrity as architectural features and cannot address significant research issues as archaeological features. Consequently, we do not recommend any further management activity for these features. The developer, however, may wish to point the features out to prospective owners and encourage them to preserve these bits of early agricultural history if possible, perhaps by incorporating them into gardens.

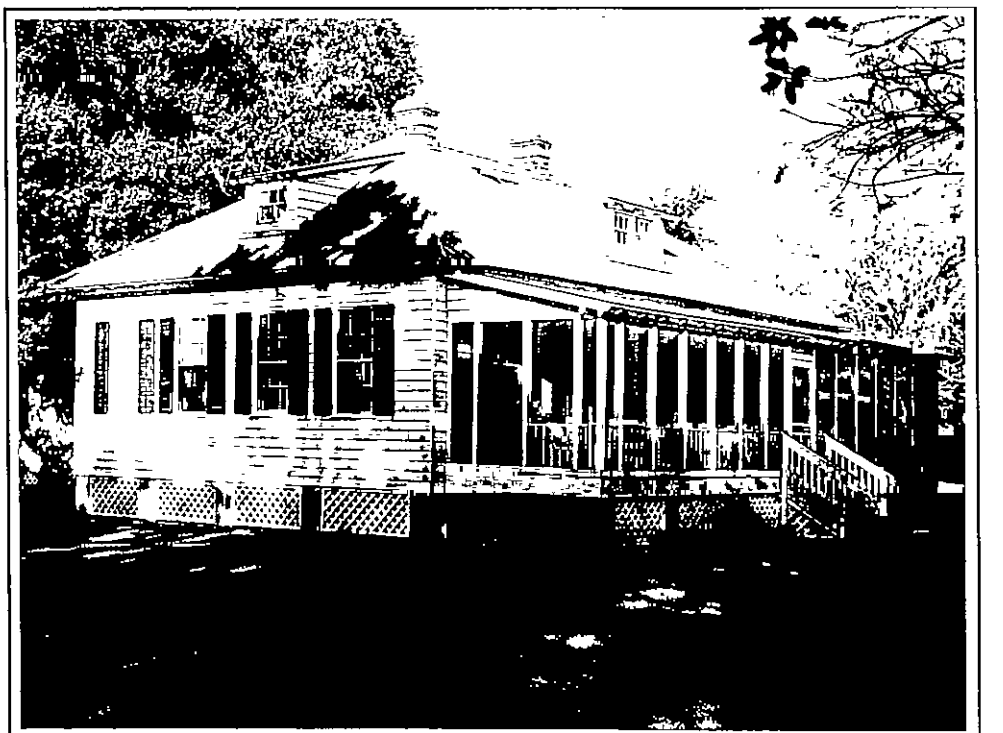


Figure 20. Sandiford Bee House, view to the northeast, showing the south and west facades.

The Architectural Survey

Since the house currently owned by the Pruitt's had not been incorporated into the Statewide Architectural Survey, we recorded the site as U/19/0678/2492049. The survey card was completed and background research was conducted by Ms. Sarah Fick of Preservation Consultants, while this description was prepared by the author.

The structure is a one and a half story, square frame dwelling built on piers and covered with weatherboarding. The building has a metal hipped roof with shed dormers. At the eves of the structure, under the roof, there are exposed roof rafters. There is a south facing screened porch, denoting what was functionally the front of the house. There are two central brick chimneys. Windows have a 6/6 pane configuration (Figure 20).

Alterations include the replacement of the original foundation piers with concrete block piers, probably about 1985. The current dormer windows replaced vent dormer to create a living space in the attic, also probably about 1985. A lateral gable rear wing replaced the kitchen house, which was destroyed by Hurricane Hugo in 1990.

Also present is a well or pump house, in poor condition, to the west of the main house. To the rear is a large garage and utility building, also on frame construction with a metal roof. This building has been altered by the addition of skylights in the roof and replacement of at least the entry door (Figure 21).

As previously discussed, this structure is called the Sandiford Bee House and is reported to have been built in 1908 to replace an even earlier structure. Our historical research has revealed that the house was present by 1919 (when it is shown on the first

Figure 21. Support building and garage associated with the Sandiford Bee House, view to the north, showing the south facade.

topographic map of the area), but was not present in 1866 (when the coastal survey chart was first completed). Consequently, there is good evidence to suggest that a house was originally constructed on the property between 1866 and 1919. The legal records reveal that the property was first acquired by Robert Bee, jointly with W.H. Hinson, in 1879. This likely means that we can further refine the date of the original construction to sometime between 1879 and 1919. The current house (or at least the current layout) seems to have been in place by 1939 when a plat was prepared for the property.Sandiford Bee acquired the tract from Hinson in 1919, suggesting that the house is named not for its original builder, but for one of its later owners.

No archaeological survey was conducted around this structure, although we did observe that the current dock is situated in an area of extensive brick rubble. This rubble may represent the remains from the original house (which is thought to have burnt) or perhaps even ballast from boats which used this as a landing. We also believe that the house is in the general area of not only a series of earthworks, but also the road which linked central James Island with Secessionville during the Civil War. It seems likely that this road and bridge network was about where the dock is today. As a result, this site contains not only standing architecture, but very likely significant archaeological remains.

This structure and its associated out-buildings are recommended potentially eligible for inclusion on the National Register of Historic Places. We do not, however, believe that it will be affected by the proposed under-taking. The house is situated approximately 1,000 feet east of the survey tract and there is considerable forest screening between the proposed development and this structure. We recommend that this vegetation be maintained.

SUMMARY AND RECOMMENDATIONS

This study involved the examination of a 13.9 acre tract situated on the southeastern edge of James Island in Charleston County, South Carolina (the study area is actually within the city limits of Charleston). The tract is proposed to be divided into three lots, each ranging in size from about 3.1 to 6.6 acres. The study was conducted as a requirement of the conservation easement held on the tract by Historic Charleston Foundation. This report provides the results of that investigation.

Much of the tract consists of moderately well drained soils, although drainage becomes poorer toward the marsh edge. Nevertheless, the low topography and absence of a distinct marsh bluff edge seems to limit prehistoric use. Historic research revealed that the parcel had been part of a small holding, typically around 100 acres. This suggests that it might have been worked with one or more other tracts, perhaps limiting its potential to contain historic sites. We found that while Civil War earthworks were constructed to the east and west of the study parcel, there was no evidence of any activities on the tract itself.

The tract was investigated using shovel tests placed at 100 foot intervals on transects spaced 100 feet apart. A metal detector survey was conducted of three areas, each approximately 100 feet square. In addition, pedestrian survey was conducted in all areas where surface visibility allowed, with specific attention to the marsh edge. Areas of standing water were not shovel tested.

Although fairly far removed from the study tract, we also collected sufficient information from the what is known as the Sandiford Bee House to complete an architectural survey card. This has been filed with the S.C. Department of Archives and History.

Only one previously reported site,38CH507, was reported for the survey area. This site, originally found as a series of diffuse scatters in plowed fields, covered an area of nearly 200 acres. During the archaeological survey of the Pruitt tract, we did encounter a single shovel test which contained prehistoric materials. These items have been curated as part of that original site. Nevertheless, there is no indication that additional prehistoric remains are present. Given the limited data sets, questions regarding site integrity (the plowing has created a plowzone of at least a foot in depth), and the probability that the site cannot address significant research questions, we do not believe that this portion of 38CH507 is eligible for inclusion on the National Register.

One other "cluster" of remains found in the shovel testing is modern (post-dating 1973) and appears to represent debris from construction. The metal detector survey also failed to identify any materials older than the 1970s. None of these remains are recorded as archaeological sites or assessed, since they are all less than 50 years old.

Our pedestrian survey of the property revealed three earthwork features. One, in the marsh, was identified as the remains of the causeway which originally led from Folly Road directly to the Sandiford Bee House. A second, at the west end of the survey tract, was an east-west dike which we believe was associated with that same road, possibly as a field line or even as the remains of the road itself. The third feature is a north-south section of field line and probable agricultural drainage ditch. All of these landscape features are more than 50 years old. None, however, appear to be sufficiently important (or able to address landscape issues) to warrant a recommendation of National Register eligibility. We believe that their recordation has adequately addressed their contribution to the historic record.

The Sandiford Bee House, while off the study tract, does appear to be potentially eligible for inclusion on the National Register of Historic Places, likely under Criterion C. As a result, the development activities

should be especially careful to ensure that there is no visual intrusion on the structure. Currently there is an adequate vegetation buffer (of nearly 1,000 feet). This buffer should be carefully maintained. Finally, it is likely that the Sandiford Bee House and its immediate surroundings have archaeological, as well as architectural, significance.

As a result, we recommend no additional cultural resource management activities on this tract, pending review and concurrence by the Historic Charleston Foundation. Should the proposed development require OCRM permitting, it may also be necessary to seek the opinion of the State Historic Preservation Office.

It is possible that archaeological remains may be encountered in the corridor during maintenance activities. As always, the developer's contractors should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the Historic Charleston Foundation, or Chicora Foundation. No further land altering activities should take place in the vicinity of these discoveries until they have been examined by an archaeologist.

SOURCES CITED

Adams, Natalie

1994a Archaeological Reconnaissance of the 37.3 Acre Seaside Plantation Tract, Charleston County, South Carolina. Research Contribution 150. Chicora Foundation, Inc., Columbia.

1994b Archaeological Reconnaissance of the 45.6 Acre Seaside Plantation Tract, Charleston County, South Carolina. Research Contribution 151. Chicora Foundation, Inc., Columbia.

Allston, R.F.W.

1854 *Essay on Sea Coast Crops*. A.E. Miller, Charleston.

Anderson, David G.

1979 *Excavations at Four Fall Line Sites: The Southeastern Beltway Project.* Commonwealth Associates, Inc., Jacksonville, Michigan. Submitted to the South Carolina Department of Highways and Public Transportation, Columbia.

Anderson, David G., Charles E. Cantley, and A. Lee Novick

1982 *The Mattassee Lake Sites: Archaeological Investigations Along the Lower Santee River in the Coastal Plain of South Carolina.* Commonwealth Associates, Jackson, Michigan.

Anonymous

1884 *South Carolina in 1884: A View of the Industrial Life of the State*. The News and Courier, Charleston, South Carolina.

Blanton, Dennis B., Christopher T. Espenshade, and Paul E. Brockington, Jr.

1986 *An Archaeological Study of 38SU83: A Yadkin Phase Site in the Upper Coastal Plain of South Carolina*. Garrow and Associates, Inc., Atlanta.

Brennan, Patrick

1996 *Secessionville: Assault on Charleston*. Savas Publishing Company, Campbell, California.

Burton, E. Milby

1970 *The Siege of Charleston, 1861-1865*. University of South Carolina Press, Columbia.

Cable, John

1991 *Archaeological Test Excavations on the Northeastern Perimeter of the Buck Hall Site (38CH644), Francis Marion National Forest, South Carolina*. New South Associates, Irmo, South Carolina.

Caldwell, Joseph R.

1958 *Trend and Tradition in the Prehistory of the Eastern United States.* Memoirs of the American Anthropological Association 88.

Coclanis, Peter A.

1989 *The Shadow of a Dream: Economic Life and Death in the South Carolina Low Country 1670-1920*. Oxford University Press, New York.

Coe, Joffre

1964 *The Formative Cultures of the Carolina Piedmont*. Transactions of the American Philosophical Society

54(5).

Cooke, C. Wythe
1936 *Geology of the Coastal Plain of South Carolina*. Bulletin 867. U.S. Geological Survey, Washington, D.C.

Coon, David L.
1972 *The Development of Market Agriculture in South Carolina*. Ph.D. dissertation, University of Illinois. University Microfilms, Ann Arbor.

DePratter, Chester
1979 Ceramics. In *The Anthropology of St. Catherines Island 2. The Refuge-Deptford Mortuary Complex*. Anthropological Papers of the American Museum of Natural History 56(1): 109-132.

Dunbar, Gary S.
1961 Colonial Carolina Cowpens. *Agricultural History* 35:125-130.

Edgar, Walter B., editor
1972 *The Letterbook of Robert Pringle*. 2 vols. University of South Carolina Press, Columbia.

Ferguson, Leland G.
1971 *South Appalachian Mississippian*. Ph.D. dissertation, University of North Carolina, Chapel Hill. University Microfilms, Ann Arbor, Michigan.

Fraser, Walter J., Jr.
1989 *Charleston! Charleston! The History of a Southern City*. University of South Carolina Press, Columbia.

Goodyear, Albert C., John H. House, and Neal W. Ackerly
1979 *Laurens-Anderson: An Archaeological Study of the Inter-Riverine Piedmont*. Anthropological Studies 4, Occasional Papers of the Institute of Archaeology and Anthropology, University of South Carolina, Columbia.

Gragg, Rod
1994 A Bloody Half-Hour. *Civil War Times* 32(6).

Hammond, Henry
1884 Report on Cotton Production of the State of South Carolina. In *Report on the Cotton Production in the United States*, edited by Eugene W. Hilgard, pp. 451-526. Census Office, Department of the Interior, Washington, D.C.

Hanson, Glen T., Jr.
1982 The Analysis of Late Archaic-Early Woodland Adaptive Change Along the Middle Savannah River: A Proposed Study. *South Carolina Institute of Archaeology and Anthropology Notebook* 14:1-38.

Hayes, Jim
1978 *James and Related Sea Islands*. Walker, Evans and Cogswell, Charleston, South Carolina.

Hemphill, J.C.
1908 *Men of Mark in South Carolina*. vol. 2. Men of Mark Publishing Co., Washington, D.C.

Hilliard, Sam B.
1984 *Atlas of Antebellum Southern Agriculture*. Louisiana State University Press, Baton Rouge.

Jones, J. William, editor
1884 Battle of Secessionville: Report of Colonel Johnson Haygood. *Southern Historical Society Papers* 12(1-2):63-65.

Lefler, Hugh T., editor
1967 *Lawson's A New Voyage to Carolina*. University of North Carolina Press, Chapel Hill.

Mathews, Maurice
1954 A Contemporary View of Carolina in 1680. *South Carolina Historical and Genealogical Magazine* 55:153-159.

Mathews, Thomas D., Frank W. Stapor, Jr., Charles R. Richter, John V. Miglarese, Michael D. McKenzie, and Lee R. Barclay
1980 *Ecological Characterization of the Sea Island Coastal Region of South Carolina and Georgia, vol. 1*. Office of Biological Services, Fish and Wildlife Service, Washington, D.C.

Michie, James
1977 *The Late Pleistocene Human Occupation of South Carolina*. Unpublished Honor's Thesis, Department of Anthropology, University of South Carolina, Columbia.

Miller, E.N., Jr.
1971 *Soil Survey of Charleston County, South Carolina*. U.S. Department of Agriculture, Soil Conservation Service, Washington, D.C.

Mills, Robert
1972 [1826] *Statistics of South Carolina*. Reprinted. The Reprint Press, Spartanburg, South Carolina.

Morgan, Phillip D.
1977 *The Development of Slave Culture in Eighteenth Century Plantation America*. Unpublished Ph.D. dissertation, University College, London.

Oliver, Billy L.
1981 *The Piedmont Tradition: Refinement of the Savannah River Stemmed Point Type*. Unpublished Master's thesis, Department of Anthropology, University of North Carolina, Chapel Hill.

Phelps, David A.
1983 Archaeology of the North Carolina Coast and Coastal Plain: Problems and Hypotheses. In *The Prehistory of North Carolina: An Archaeological Symposium*, edited by Mark A. Mathis and Jeffrey J. Crow, pp. 1-52. North Carolina Division of Archives and History, Department of Cultural Resources, Raleigh.

Power, J. Tracy
1992 "An Affair of Outposts": The Battle of Secessionville, June 16, 1862. *Civil War History* 38(2):156-172.

Rosen, Robert
1982 *A Short History of Charleston*. Lexikos, San Francisco.

1994 *Confederate Charleston: An Illustrated History of the City and the People During the Civil War*. University of South Carolina Press, Columbia.

Ryan, Thomas M.
1972 *Archaeological Survey of the Columbia Zoological Park, Richland and Lexington Counties, South Carolina*. Research Manuscript Series 37. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.

Sandifer, Paul A., John V. Miglarese, Dale R. Calder, John J. Manzi, and Lee A. Barclay
1980 *Ecological Characterization of the Sea Island Coastal Region of South Carolina and Georgia*, vol. 3. Office of Biological Services, Fish and Wildlife Service, Washington, D.C.

Sassaman, Kenneth E., Mark J. Brooks, Glen T. Hanson, and David G. Anderson

1990 *Native American Prehistory of the Middle Savannah River Valley*. Savannah River Archaeological Research Papers 1. Occasional Papers of the Savannah River Archaeological Research Program, South Carolina Institute of Archaeology and Anthropology, University of South Carolina.

Schneider, David and Robert P. Stockton

1989 *James Island and Johns Island Historical Survey*. Preservation Consultants, Inc., Charleston, South Carolina.

Service, E.M.

1966 *The Hunters*. Prentice-Hall, Englewood Cliffs.

South, Stanley A.

1976 An Archaeological Survey of Southeastern North Carolina. *South Carolina Institute of Archaeology and Anthropology Notebook* 93.

Stoltman, James B.

1974 *Groton Plantation: An Archaeological Study of a South Carolina Locality*. Monographs of the Peabody Museum 1, Harvard University, Cambridge.

Taylor, Richard L.,editor

1984 *Cultural Resources Survey of the Proposed Pee Dee Electric Generating Facility in Florence County, South Carolina*. Commonwealth Associates, Jackson, Michigan.

Trinkley, Michael

1980a *Additional Investigations at 38LX5*. South Carolina Department of Highways and Public Transportation, Columbia.

1980b *Investigation of the Woodland Period along the South Carolina Coast*. Ph.D. dissertation. Department of Anthropology, University of North Carolina, Chapel Hill.

1990 *An Archaeological Context for the South Carolina Woodland Period*. Chicora Foundation Research Series 22. Chicora Foundation, Inc., Columbia, S.C.

Trinkley, Michael and Debi Hacker

1997 *Excavations at a Portion of the Secessionville Archaeological Site (38CH456), James Island, Charleston County, South Carolina*. Research Series 52. Chicora Foundation, Inc., Columbia.

Trinkley, Michael, Debi Hacker, and Natalie Adams

1993 *Life in the Pee Dee: Prehistoric and Historic Research on the Roche Carolina Tract, Florence County, South Carolina*. Research Series 39. Chicora Foundation, Inc., Columbia.

Ver Steeg, Clarence L.

1975 *Origins of a Southern Mosaic*. University of Georgia Press, Athens.

Walthall, John A.

1980 *Prehistoric Indians of the Southeast: Archaeology of Alabama*. University of Alabama Press, University.

Ward, Trawick

1978 *The Archaeology of Whites Creek, Marlboro County, South Carolina*. Research Laboratories of Anthropology, University of North Carolina, Chapel Hill.

1983 Whites Creek: The Second Time Around. *South Carolina Antiquities* 15:63-65.

Waterhouse, Richard
1975 England, the Caribbean, and the Settlement of Carolina. *Journal of American Studies* 9:259-281.

Williams, Stephen B., editor
1968 *The Waring Papers: The Collected Works of Antonio J. Waring, Jr.* Papers of the Peabody Museum of Archaeology and Ethnology 58.

Wood, Peter
1974 *Black Majority*. W.W. Norton, New York.

Woodhead, Henry, editor
1997 *Voices of the Civil War — Charleston*. Time-Life Books, Alexandria, Virginia.